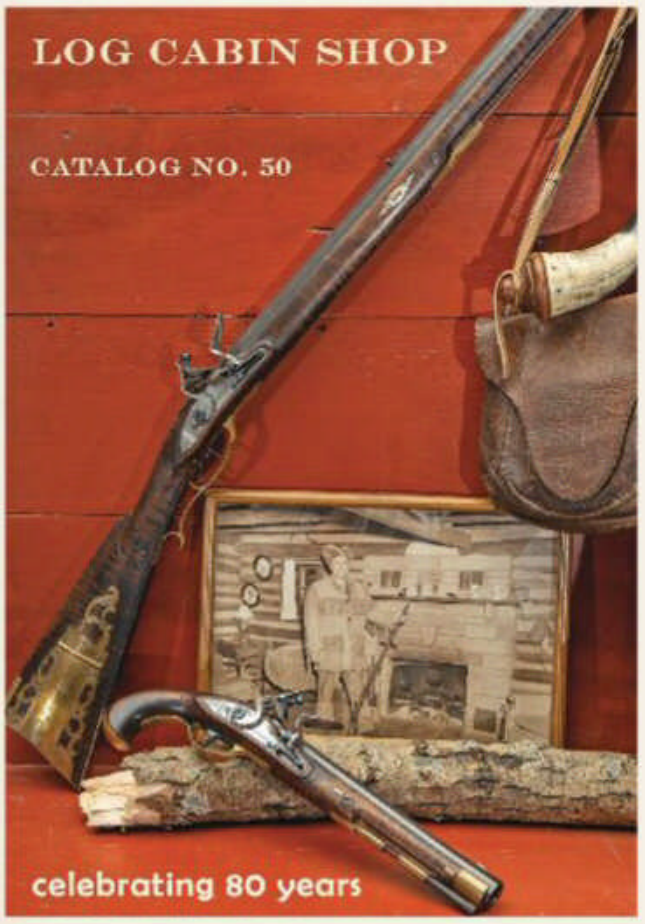
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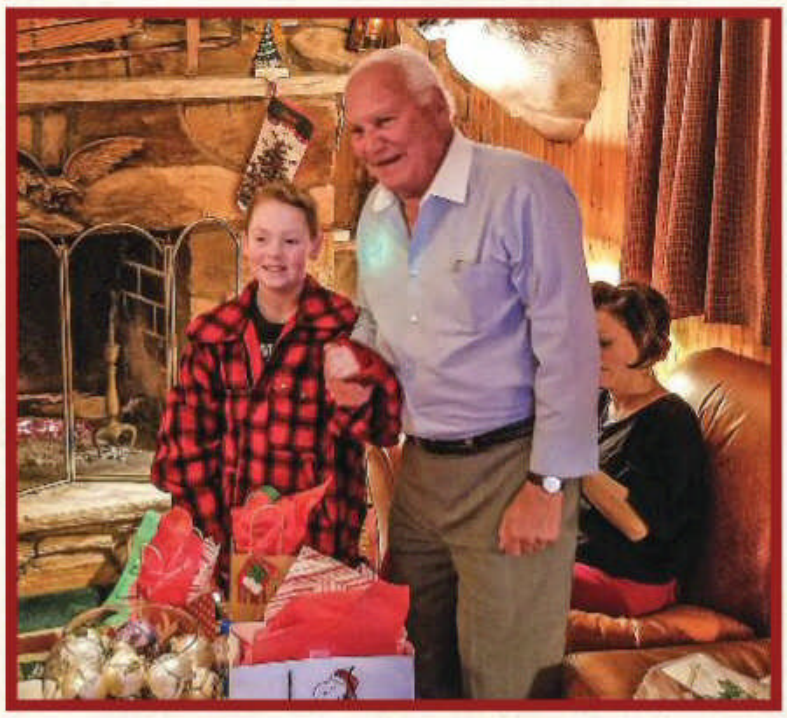


Editor's Welcome

Traditionally Modern

Pops took me on my first "you're on your own, kid" whitetail hunt 40-some years ago. I can still hear the sound of frosty leaves under my Sorel boots as he quietly but swiftly guided me in the darkness into my stand position—a gigantic boulder nestled between blowdowns and scrub brush that overlooked a gully filled with mature oak trees on what our gun club members called "The German Property." Right after settling onto my five-gallon pail seat, I checked my hand-me-down Woolrich hunting jacket pocket regularly to make sure my buck slayer was locked and loaded.

No, my dad didn't plop his 9-year-old son in the woods packing a large-frame revolver. You see, my "firearm" at the time was a 35. Nope, not a gun chambered in .35 Whelen. I'm referring to the old Kodak 35mm film camera I used to shoot my first doe with three yearlings in tow on a chilly, calm late-November morning. At the time, I was still several years from being old enough to legally hunt with a muzzleloader or 12 gauge. I grew up in a "shotgun-only zone" in upstate New York, but please don't hold the NY part of it against me, as I'm a registered member of the Conservative Party of New York.



The author's son Michael was honored to receive the 1960s-era Woolrich hunting coat from his nonno for Christmas. It first saw action in the big woods of Maine, but also made hunting trips out west, down south and in Saskatchewan, Canada.

I can remember shaking with utter excitement with every press of the camera's button as the huge doe milled around nabbing acorns while flicking her tail to let her young know that all's good in the woods. I gulped hard as the deer meandered in my direction and thought to myself, "Oh, Lord, don't let the battery on this camera die."

It was a week later when we finally got the dark, mostly blurry prints back from the local film processor. At any rate, those long-lost prints were trophies in my book, and memories that will never be out of focus. Now there might be youngsters reading that and saying, "What in the world is this guy talking about?" Kids today, mine included, have no idea how drastically different technology like smartphones have changed the world we live in. It seems that today it's all about immediate gratification, and memories equal phone galleries.

I'm not knocking the digital age or technology. In fact, in this issue, we have a special "Modern Sporting Section" (page 66) that showcases some remarkable firepower and gear from classic American companies like Henry, Leupold, Thompson/Center, Savage Arms and Remington. Entwined into those gear reviews are memorable hunts with family and friends. Heck, we even have an article about game cameras.

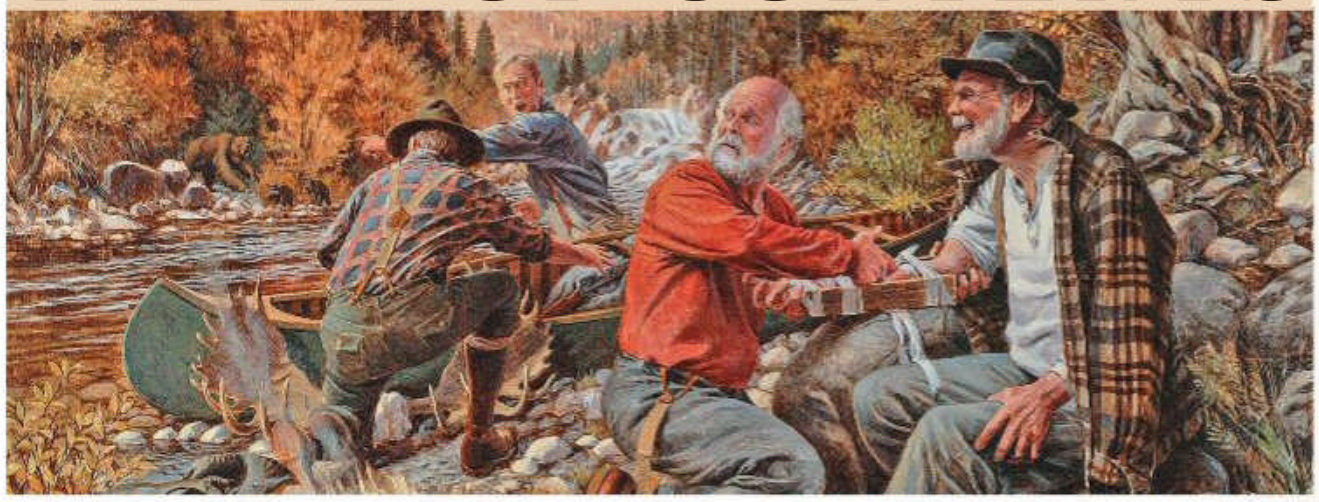
Traditionalists fear not, as we have plenty of longrifle and nostalgic mountain-man content in the pages ahead. Plus, you'll find more trapping and DIY projects than you can shake a stick at.

A final note regarding our "cover model." "They Call Me Matthew" is a wonderful piece done by the late Paul Calle. Matthew looks to be a man on a mission, ready to take on the wilds of the great American frontier. When we selected this imagery, we couldn't help but wonder what Matthew and others of his era would've thought of today's technological advancements. My guess is that if the guns and gear made him more successful in his pursuits, he'd say, "Bring it on, and let's ride!" Please shoot us your thoughts and feedback—good, bad or ugly—by emailing us at editdesk@athlonoutdoors.com. —*Nino Bosaz*

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Fall 2020
Volume 9, Issue 4

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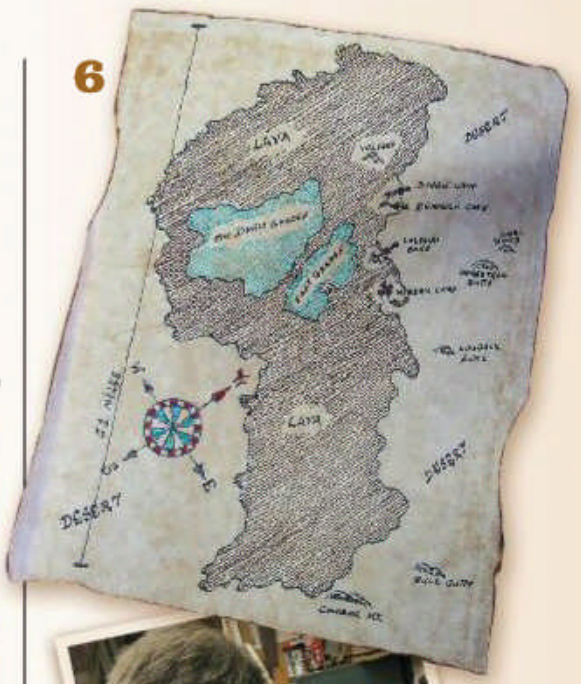
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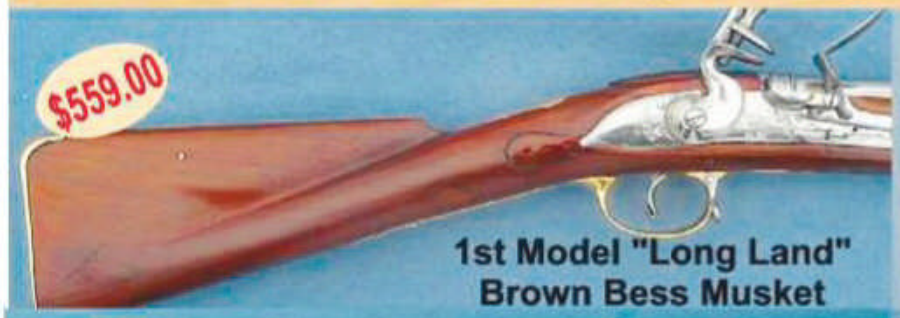


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1740 English Dragoon Pistol

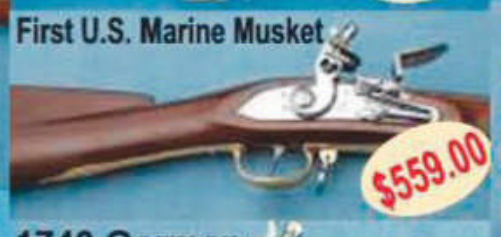




1733 French Navy Pistol



French "Fusil de Chasse" Fur Trade Musket





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17th century English Pistol



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Baker Rifle	Sea Service Brown Bess
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Charleville Cavalry Carbine	Napoleon Imperial Guard Musket
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Discovered! Unopened Bag of 138-Year-Old Morgan Silver Dollars

Unopened for 138 Years!

Coin experts amazed by "Incredible Opportunity"



- ✓ Historic Morgan Silver Dollars
- ✓ Minted in New Orleans
- ✓ Struck and bagged in 1882
- ✓ Unopened for 138 years
- ✓ 26.73 grams of 90% fine silver
- ✓ Hefty 38.1 mm diameter
- ✓ Certified Brilliant Uncirculated by NGC
- ✓ Certified "Great Southern Treasury Hoard" pedigree
- ✓ Limit five coins per household

Actual size is 38.1 mm

The Morgan Silver Dollar is the most popular and iconic vintage U.S. coin. They were the Silver Dollars of the Wild West, going on countless untold adventures in dusty saddlebags across the nation. Finding a secret hoard of Morgans doesn't happen often—and when it does, it's a *big deal*.

How big? Here's numismatist, author and consultant to the Smithsonian® Jeff Garrett:

"It's very rare to find large quantities of Morgan Silver Dollars, especially in bags that have been sealed... to find several thousand Morgan Silver Dollars that are from the U.S. Treasury Hoards, still unopened, is really an incredible opportunity."
-Jeff Garrett

But where did this unique hoard come from? Read on...

Morgans from the New Orleans Mint

In 1859, Nevada's Comstock Lode was discovered, and soon its rich silver ore made its way across the nation, including to the fabled New Orleans Mint, the only U.S. Mint branch to have served under the U.S. government, the State of Louisiana and the Confederacy. In 1882, some of that silver was struck into Morgan Silver Dollars, each featuring the iconic "O" mint mark of the New Orleans Mint. Employees then placed the freshly struck coins into canvas bags...

The U.S. Treasury Hoard

Fast-forward nearly 80 years. In the 1960s, the U.S. government opened its vaults and revealed a massive store of Morgan Silver Dollars—including *full, unopened bags* of "fresh" 1882-O Morgan Silver Dollars. A number of bags were secured by a child of the Great Depression—a southern gentleman whose upbringing showed him the value of hard assets like silver. He stashed the unopened bags of "fresh" Morgans away, and there they stayed...

The Great Southern Treasury Hoard

That is, until *another* 50 years later, when the man's family finally decided to sell the coins—still in their unopened bags—which we secured, bag and all! We submitted the coins to respected third-party grading service Numismatic Guaranty Corporation (NGC), and they agreed to honor the southern gentleman by giving the coins the pedigree of the "Great Southern Treasury Hoard."



These gorgeous 1882-O Morgans are as bright and new as the day they were struck and bagged 138 years ago. Coins are graded on a 70-point scale, with those graded at least Mint State-60 (MS60) often referred to as "Brilliant Uncirculated" or BU. Of all 1882-O Morgans struck, *LESS THAN 1% have earned a Mint State grade*. This makes these unopened bags of 1882-O Morgans extremely rare, certified as being in BU condition—nearly unheard of for coins 138 years old.

Don't Miss This Rare Opportunity—Order Now!

Regular 1882-O Morgans sell elsewhere for as much as $133, and that's without the original brilliant shine these "fresh" 138-year-old coins have, without their special NGC hoard designation, and without their ability to tell their full, complete story from the Comstock Lode all the way to your collection.

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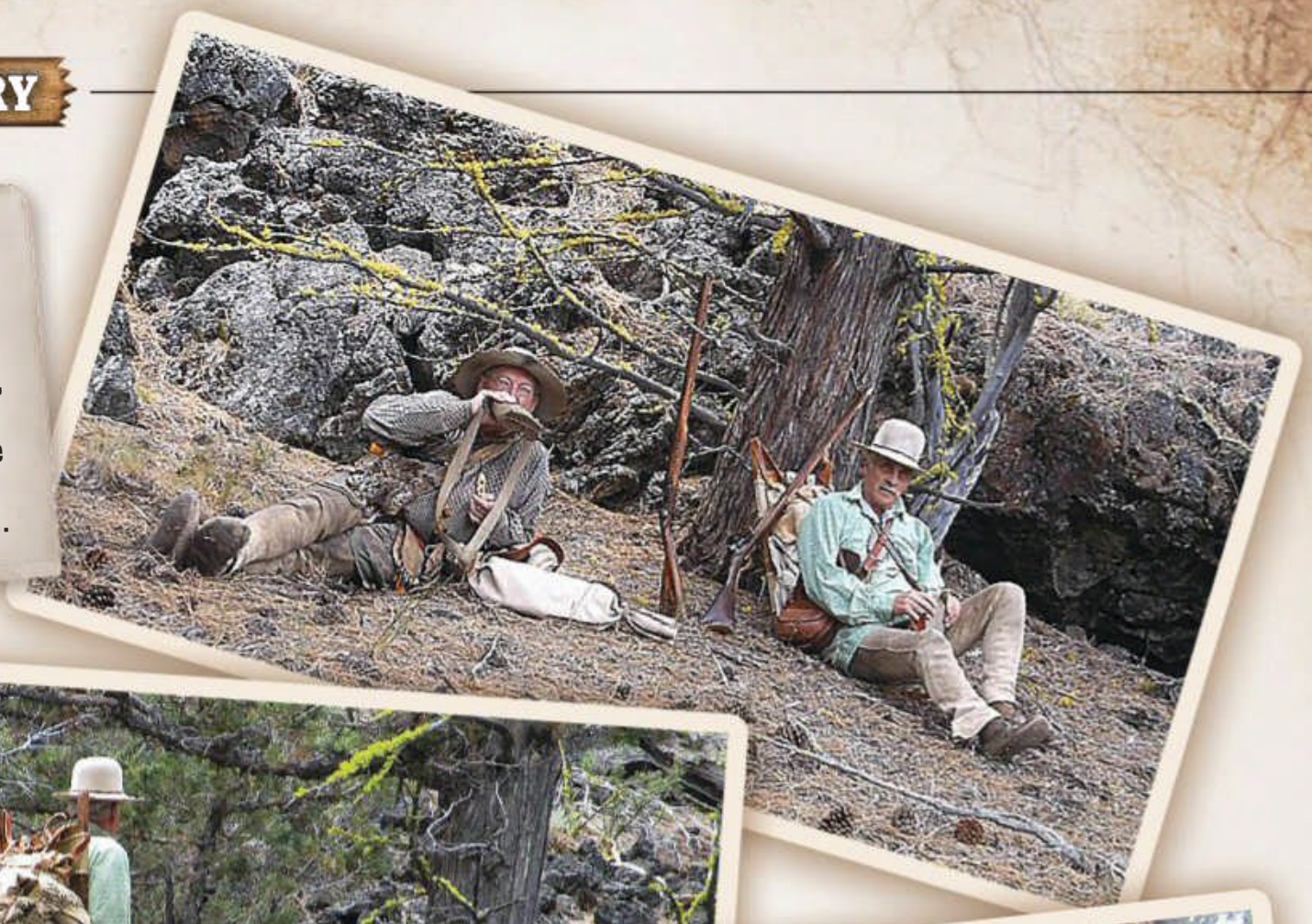
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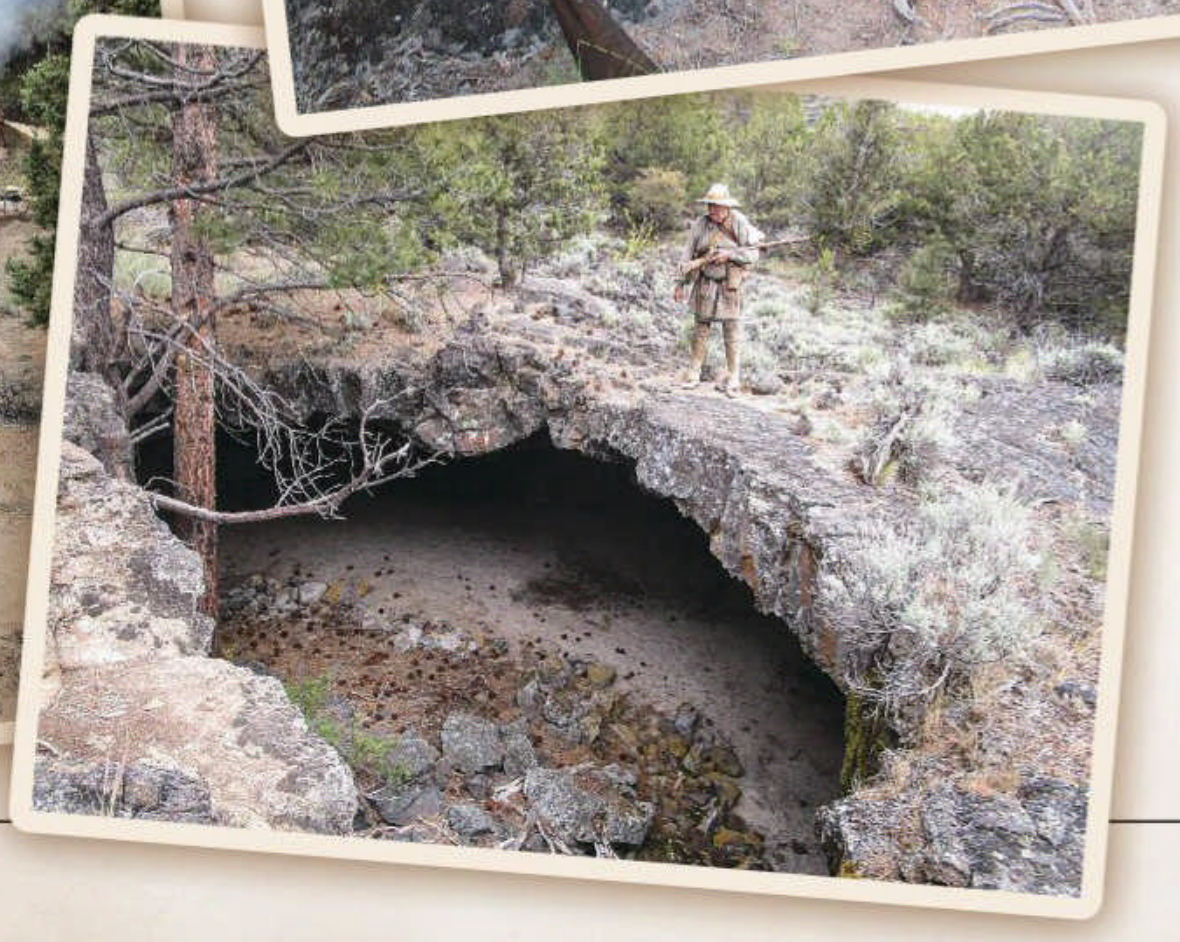
The only way to get a true feeling of what early mountain men experienced is to get out there and do the things they did, using the equipment they used. That's just what the author and his trekking partner did at Devils Den.











TREKKING DEVILS GARDEN

Outfitted and equipped as mountain men would be, we set off into the wild lava fields



BY ROSS WESTGATE

The relentless expansion from east to west presented early explorers and fur trappers with many challenges. Countless natural obstacles stood in the way of exploration and eventual settlement. For the mountain men during the era of the beaver trade, the search for fur-rich mountain streams was constant. The land had to be crossed and explored no matter how harsh the conditions. Furs were money, and success meant overcoming whatever stood in the way; these men had to find out what was over the next hill.

With that thought in mind, my trekking partner, Nick Hanauska, and I set out for some exploring of our own. In full mountain-man garb and carrying equipment true to the period, we set out to explore Devils Garden. The only way to get a true feeling of what the mountain men went through is to get out there and do the things they did. That is what brought me and Nick to this place.

➤ All Set At Base Camp

In the high desert of northern Lake County, Oregon, lies a vast lava field that's 16,000 years old, 11 miles long and 2 miles wide in places. The area has countless caves and lava tubes of varying sizes, some reaching long distances underground. Ledges and overhangs abound, and cracks and holes dot the area. It truly looks like the devil had a hand in its creation.

Ponderosa pines and junipers grow out of the lava cracks. Water for their roots is supplied by winter and spring storms and is stored beneath the surface. Thirsty roots reach down and drink somewhere in the depths of the volcanic rock. Though

the trees are sparse, they are quite healthy and provide much-appreciated shade. The pine needles, when gathered and piled under you, make a great bed.

We set up our base camp along the edge of the lava flow and made ourselves comfortable. We planned to spend our first night in our canvas diamond shelters. The next day, we would start our trek traveling with only our overnight packs, and we would see what lay over that next hill. No shelter would be carried, so when evening came, we would rely on the best natural shelter we could find. Any ledge, cave or overhang large enough for us to stretch out for the night would do.

My overnight pack is an old wooden pack board with one wool blanket wrapped in a piece of canvas to keep it dry while traveling. Folded up inside my blanket is a long wool shirt to wear while sleeping. My lightweight brain-tanned deerskin jacket is bundled in as well. Should the weather turn colder, wearing these to bed nearly equals another blanket.

Some jerky and dried fruit would keep me going during the day, and for supper, a chunk of venison wrapped in oil paper is stashed in my copper boiler. Meat and Russian tea would be my simple evening meal. Nick carried his favorite: vinegar meat. He prepares it by submerging a steak in a pan of half water and half vinegar and bringing it to a rolling boil for one hour, then removing it and patting it dry. This recipe has been lab tested to keep the meat bacteria-free for 20 days (but I'm not sure I would trust it that long—I might boil it up in a pot to be safe). When the meat is cooked, the vinegar flavor all but disappears with a little seasoning. My venison was frozen and wrapped in oil paper; it would take all day to thaw and be ready by suppertime. I don't usually carry fresh meat on the trail, preferring jerky or Nick's vinegar meat. On this trek, I chose to bring the venison, as that is what the mountain men would've hoped to dine on.

Nick's pack is known as a snap-pack, a heavy canvas container tied with his boiler, cup and necessities inside. A tumpline secures both his pack and his large wool blanket in place on his back while trekking. Both of our loads weighed between 13 and 18 pounds, depending on what we thought we would need—a second blanket can add 5 pounds. We each carried a canteen of water, as that resource is scarce in this area, and when we added our flintlock muzzleloaders, powder horns and shooting bags, we had a pretty good load.







Base camp was where all the amenities of modern life offered comfort. The real adventure would be the next day when the author and his trekking partner lived off what they carried in their packs.

➤ Bearing & Wearing

On this outing, I carried my smooth rifle, a gun I'd built a few years earlier and grown quite fond of for its versatility and accuracy. A smooth rifle has an unrifled barrel (like a shotgun) but has front and rear sights and may or may not have a set trigger for increased accuracy. There were plenty of these weapons on the eastern frontier that were carried west. These guns were built with rifle architecture merged with shotgun capability as well as good round-ball performance—what's not to love?

Nick was packing his 20-gauge Northwest trade gun. A .62-caliber smoothbore, this firearm is true to the guns traded to the Native Americans for furs, thus the name "trade gun." Many

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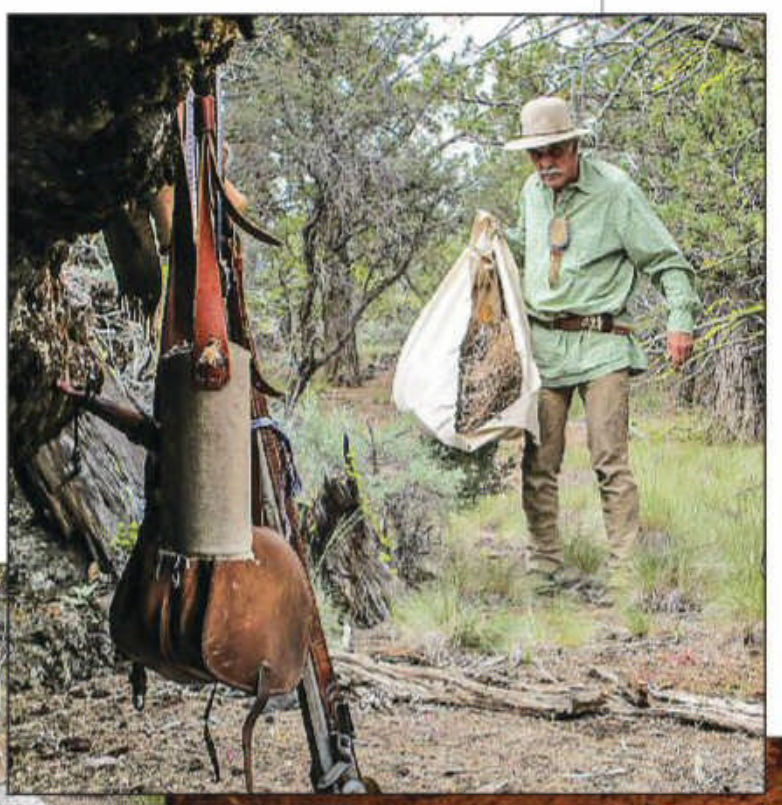
trappers and traders used them; Nick's gun looks like a museum original.

I was wearing my usual brain-tanned buckskin pants, heavy leather moccasins (this terrain is rough), a cotton frontier shirt and my felt hat. Nick prefers brain-tanned leggings and a breechclout as well as a cotton frontier shirt and his seasoned felt hat. His hand-sewn moccasins are lined with old saddle-blanket padding inside to protect his feet. We would tackle Devils Garden dressed and equipped as the original mountain men.

➤ Trekking In

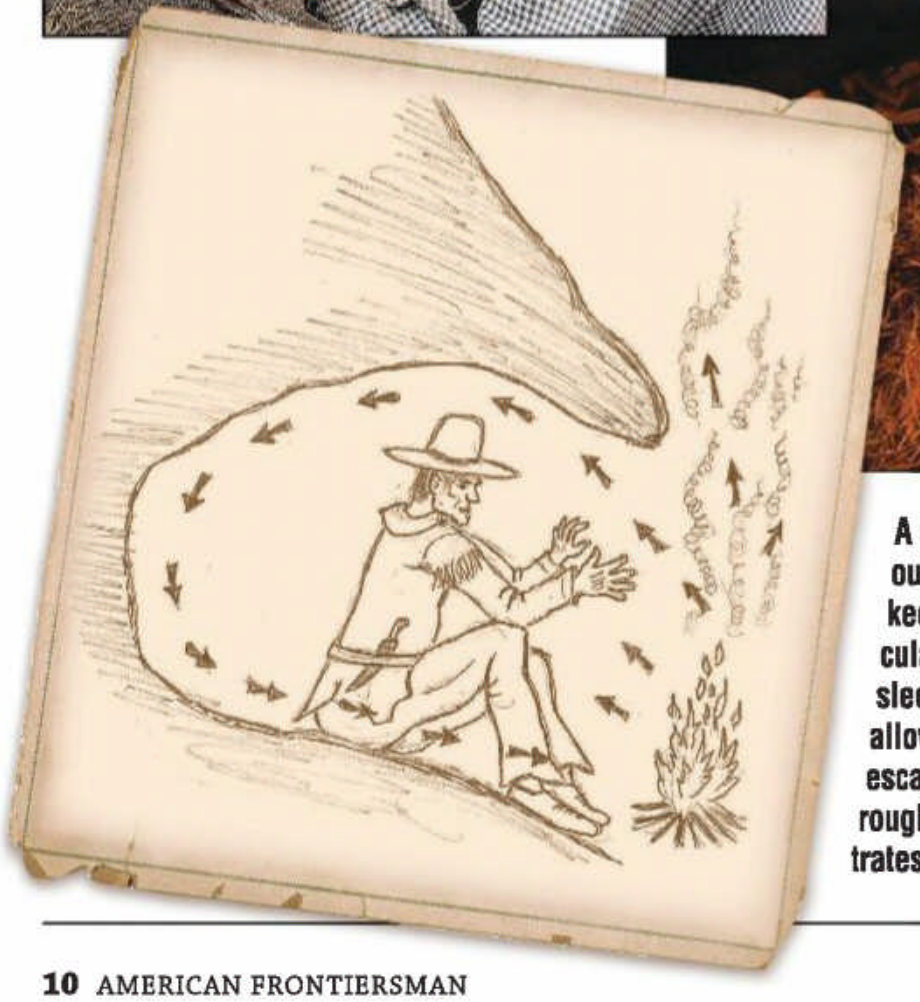
This would be our fourth excursion into this rocky environment. Each time we visit, we camp in a different place and explore areas we haven't seen before. Devils Garden is so big that we might never see it all. Walking is the only way in, and it's slow and rough going. No need to get in a hurry and break a leg or ankle while we're many miles from the nearest help.

Starting out after breakfast, we stepped into Devils Garden, and it would be 24 hours before we would walk back out.









A small fire built just outside an overhang keeps warm air circulating through your sleeping area while allowing smoke to escape. The author's rough sketch (left) illustrates that principle.

Our route would be U-shaped, gradually turning in the direction of base camp and returning after a night out. On this trip, we planned to visit one of our old camps. It was a large lava bubble with a sandy floor and a hole in the stone ceiling that served as a perfect chimney to draw our campfire smoke out. This place was the beginning of our adventures here. After that, it would be all new country and, hopefully, we would discover a good camp spot before dark. Besides our compasses, we used a butte to the east of us as a reference landmark. We also look at our back trail frequently, so we'll know what the way back looks like—another trick to not getting lost. He who looks back gets back.

After visiting our old camp, we checked a huge cave, a lava tube with a sandy floor. It would've been a decent place to roll out, as it was clean and dry, but it was so big that it wouldn't be warm at night. Just stepping into it, the temperature dropped quickly. About 100 yards in, a large portion of the roof had fallen in some time ages ago, leaving an immense skylight. Looking up, the trees growing

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above us were visible around the opening, making for a very impressive sight.

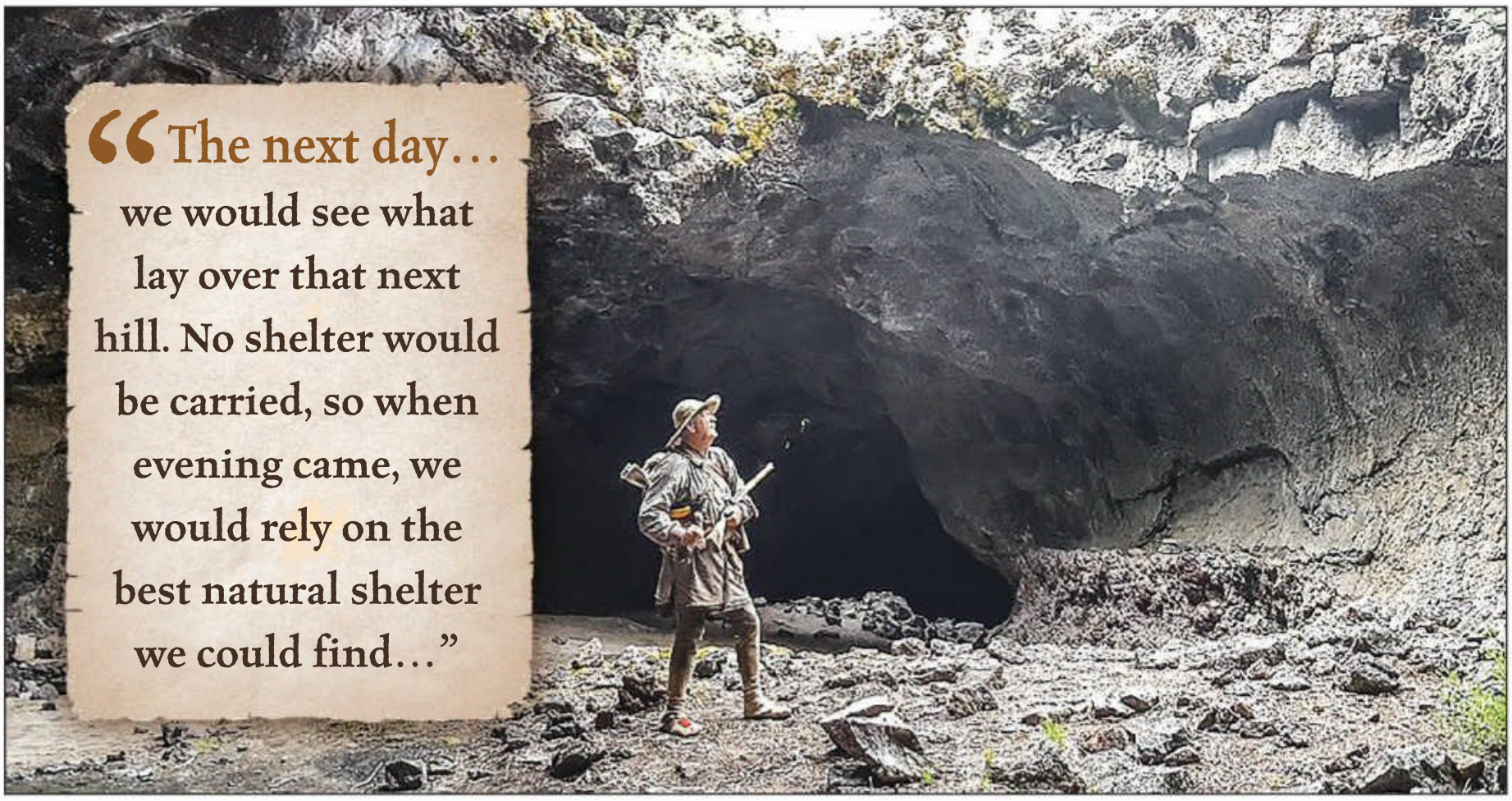
Moving on, we remained ever watchful for our nighttime camp. We checked out several small caves and ledges during the day, and some would have been acceptable, but we pressed on, hoping to find a really nice room for the night. The walking wasn't all on lava rock; a fair amount of the time we were traversing areas of pumice soil between the lava flows. Pumice is the material spewed from a volcano as sandy dust during the eruption. It made for comfortable walking, and we took advantage of it when we could, just as moccasin-clad feet in 1825 would have. We tread where the walking is easy.

➤ Just The Right Spot

With the sun sinking lower in the west, we finally found the object of our search: an overhang built for two. It was facing the right direction, so we'd have complete protection from the weather; wind and rain wouldn't touch us, and plenty of firewood was close at hand. Two pine trees were close by as well, providing the needles we'd use for our mattresses. Preparations for an overnight stay now began in earnest. I gathered the pine needles using the piece of canvas from my pack. A couple of loads of pine needles covered with the canvas and my large wool blanket finished my bed. The cooking fires were kept small—just big enough to cook chunks of meat on a skewer. Nick and I both had small bags of rice and dried vegetables, but we didn't want to use up the water in our canteens to boil them. Tonight, meat and water or a little hot tea would suffice.

> "In the high desert of northern Lake County, Oregon, lies a vast lava field that's 16,000 years old, 11 miles long and 2 miles wide… It truly looks like the devil had a hand in its creation."

Sitting in our shelter with a small fire in front of us, we were quite warm. The science of this type of shelter is simple. With a fire close to the lip of the overhang, the heat rises and spreads out. Rising warm air goes under the lip, follows the roof back and then down the rear wall and forward again. Propelled hot air makes a circle, and the camper in the middle is surrounded by moving heated air (as long as the fire burns). Very little fire is needed to provide good warmth through this method. Luckily, the weather stayed quite pleasant all night, freeing us from the burden of waking up to coax flames from the coals. We sat and talked by the fire until we felt the urge to sleep. Darkness was total, and







The author finds great satisfaction in adventures into rough country wearing period garb and using period-correct gear.

it was very quiet—no sounds disturbed us in this Devils Garden bungalow. I suppose that fatigue helped sleep come easily.

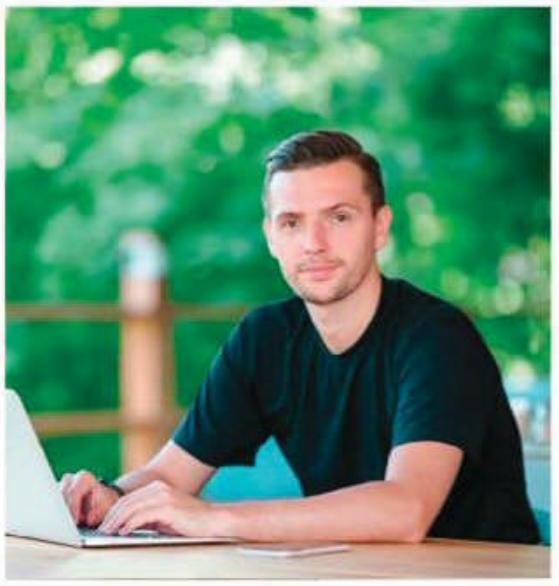
We lit no fires in the morning, as our water was nearly gone. Bearing toward the morning sunrise, we'd soon be back at our base camp. Breakfast there was quite satisfying after the labors of the last day.

We've discovered that smaller shelters are warmer than larger ones as they hold warmth from the fire and keep it close. Large openings allow the heat to spread and escape. My rough sketch on page 10 shows the action of the fire's heat in a small overhang. Try to find a shelter that you can stretch out in, as rest comes easier if you can stretch out and relax. Make sure you'll be sheltered from the wind, and pile something under you (like pine needles) to add warmth and comfort. Lastly, look for a place that will keep you dry, as dry equals warm and wet equals cold.

We'd had a great trip into Devils Garden, seen a lot of interesting country and found an excellent natural campsite that any frontiersman would appreciate. Doing it all in the garb and carrying the gear of the mountain men made it all the more rewarding. And I'm happy to report that the devil never showed up! See you on the trail. ★

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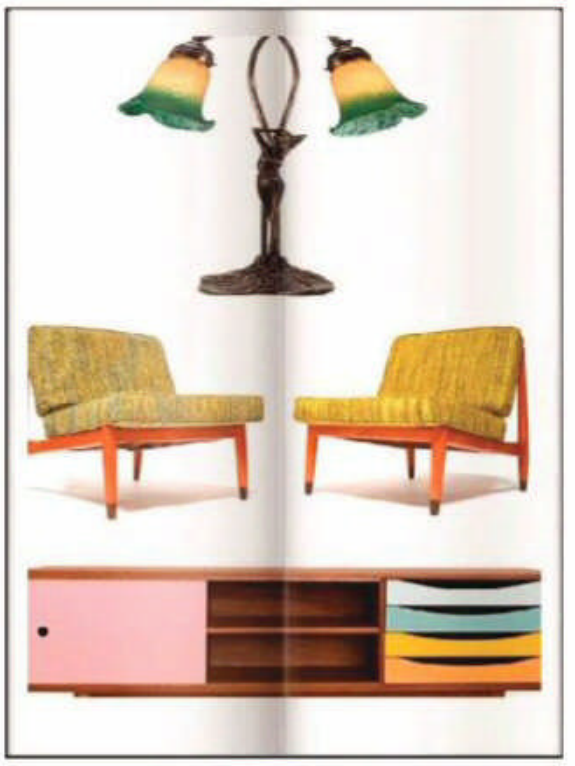
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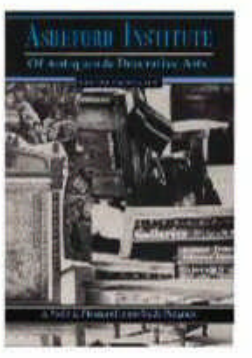
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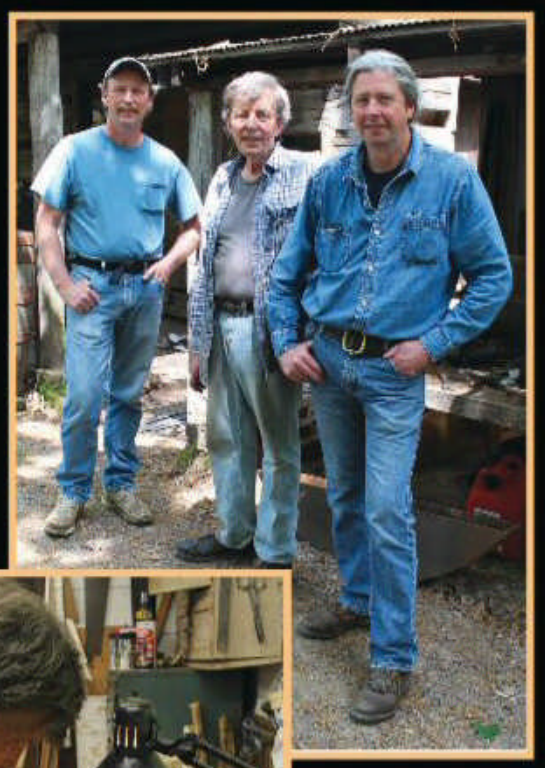
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Frank House and his wife Lally conceived and made this bone and mixed media fine art sculpture of an archetype Native American named "Nechasin."





LONGRIFLE ARTISANS

What the House brothers did for flintlock artistry

BY FRANK JARDIM

FIFTY YEARS AGO, there were no decent longrifle kits to build and only a handful of people who made the iconic American muzzleloader from scratch to sell at primitive re-enactments and craft shows. Today, dozens of artist gunmakers exhibit their finest work at the annual Contemporary Longrifle Association show held in the posh elegance of the Grand Ball Room of the Rupp Arena in Lexington, Kentucky.

Clearly, a lot has changed since the early 1960s. The House brothers and the Woodbury School associated with them have played a significant role in that. This article is too short to examine all the factors and people that contributed to the elevation of longrifle building from arts and crafts to fine art. I hope it will, however, provide a basic foundation for future study and understanding of who the Houses are as artists, how the Woodbury School evolved and why it remains so important.

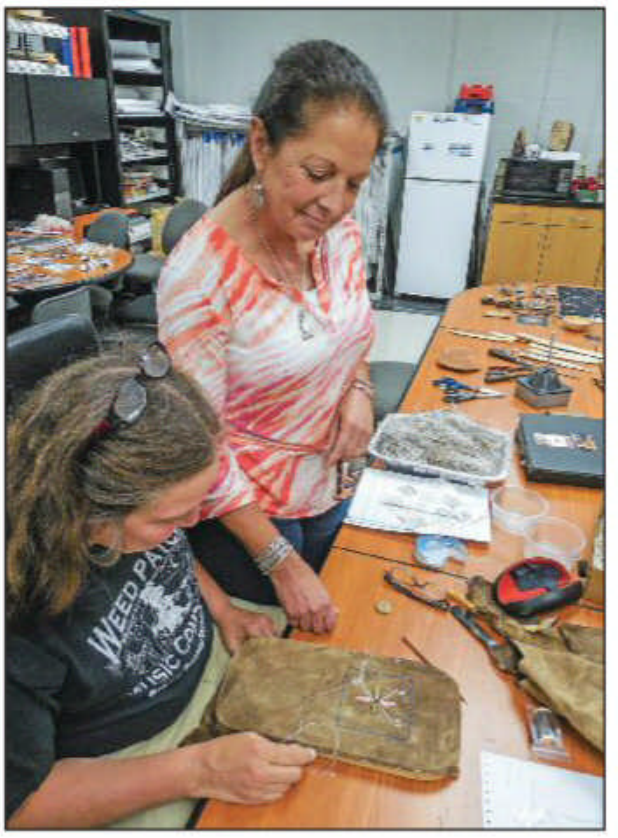
★Meet The Brothers

Let me first introduce the House brothers, who were all born in the tiny, rural town of Woodbury, Kentucky. Hershel is the oldest and, at 79, is 19 years older than Frank and 20 years older than John.

The story begins with Hershel, who grew up with a fascination for the history of the early American frontier he got from the books and stories his grandfather shared with him. The House men of Woodbury made their living with metal and the skill in their hands. Hershel was expected to do the same when he completed his service in the United States Marine Corps, but when discharged in 1965, he turned his talents to building longrifles instead of boilers. His parents were dubious, but Herschel was very good. He was so good that the rifles he made back then have increased in value because collectors prize his workmanship.

Still, making a living building flintlock longrifles was no easy task, and economic factors more than artistic ones dictated the nature of his work. The best gunsmiths of the 18th century could easily spend months building the ornate masterpieces of the Golden Age of the longrifle. Hershel didn't have that luxury. With bills to pay, he focused a lot of his time on making plain rifles of the type used by common folk to put food on the table. Mirroring the practice of frontier gunsmiths 200 years earlier, he purchased locks and barrels from artisans specializing in those parts. In this way, he could build the rest of the rifle in a week. He built a lot of these southern mountaineer rifles, most of them with hand-forged iron stock furniture and faux antique finishes. They made him, and Woodbury, famous. They shot straight, and they looked right.









Guns and accoutrements at an instructional seminar (top left). Lally (middle) teaching at the seminar. Frank (above) working in his studio, and Hershel (left) inspecting his stock creation.

★ Woodbury Defined

At this point, you might be wondering if the term Woodbury School refers to a stylistic trend. The term is reminiscent of the collector classifications used by Joe Kindig in his authoritative book, *Thoughts on the Kentucky Longrifle in its Golden Age*. "Woodbury School" could have easily referred to the large number of southern mountain rifles Hershel was producing up through the mid 1970s, but the term doesn't appear until the 21st century. By that time, Hershel's work was diverse, and that of his brother, Frank, even more so. The defining style characteristics and materials they used to build their rifles were quite varied. In addition, they didn't build just rifles. They made pistols, knives, tomahawks, powder horns and anything else that piqued their interest. If anything can be said, it is that many, but by no means all, of the House rifles were influenced by the stylistic and engineering traditions of the southern longrifles made in southwestern Virginia, western North Carolina, eastern Tennessee and Kentucky. It is important to understand that the rifles created by Hershel and his brothers aren't replicas. They represent each gunmaker's own artistic contributions to the historical lineage of the longrifle.

Frank House was National Apprentice Of The Year when he graduated in 1985 from the Boilermaker Local 40 apprentice program, but walked away from a good union job to be a full-time artist in 1988. He once told me that there was something inside him that couldn't come out in a welding rod and if he hadn't done something about it, he would have been a miserable son-of-bitch the rest of his life. Hershel instilled in him his love of frontier history and mentored both Frank and John in his shop when they were kids. Frank had every bit of Hershel's skill, but was fueled by somewhat different passions. For Frank, economics was not a factor. It was about the primacy of the art itself. This idea is at the heart of the term "Woodbury School," as will be illustrated later.

★ Digging Deeper

Frank didn't need to build plain rifles, and Hershel no longer wanted to do so. Both focused on the carved, inlaid and engraved masterpieces of the Golden Age of longrifles for inspiration. Historically, those weapons were status symbols for their owners and represented a tiny proportion of overall longrifle production. Most of the ordinary rifles were used up and thrown away, but people cherished and preserved the best for two centuries.

The thing that troubled Frank deeply was that few people in the fine art community, of which he felt himself and his peers to be members, considered their work to be art. The art community would admit there was beauty in the architecture

of longrifles, as well as other practical things around us, like 1957 Chevrolets or the Art Deco Empire State Building. However, the rifles were not works of art in themselves because they were tools, and how could anything spawned in rural areas (especially Kentucky) ever be fine art? Folk art perhaps, but fine art? Never!

Frank devoted the next 30 years of his life to changing that perspective, not only for rifle makers but other artists working in media traditionally thought of as crafts and historically practiced by artisans. He was there at the creation of, and remains active in, the Contemporary Longrifle Association (CLA) supporting and encouraging his fellow artists. Support and encouragement creates an atmosphere where art can thrive. This is an important part of the Woodbury School movement.

Fortunately, he was not alone in this fight. There were other like-minded people in the nascent contemporary longrifle culture who felt the same way. He married one, and together they worked tirelessly to change the artistic paradigm to include all types of 18th century material culture. Lally House was a working artist and recognized authority in the nearly lost pre-1800 art of Native American porcupine quill and moose hair embroidery before she married Frank. The historical inspiration and technical complexity of her work demonstrated that it deserved every bit of the artistic recognition that the gunmakers wanted. Lally and Frank knew the emerging contemporary longrifle culture they were part of needed to be artistically inclusive, rather than exclusive. Artistic inclusivity is another key aspect of the Woodbury School movement.

★ Perfection Pitfalls

There were major obstacles, however. The Kentucky Rifle Association (KRA) viewed modern builders, and especially the faux aging techniques Hershel made popular, with great suspicion, fearing it would lead to fraudulent "antiques." They finally came to realize that these skilled artists could also expertly restore their original guns. Hershel early on, and then Frank, were heavily involved in restoration work. Through the study of











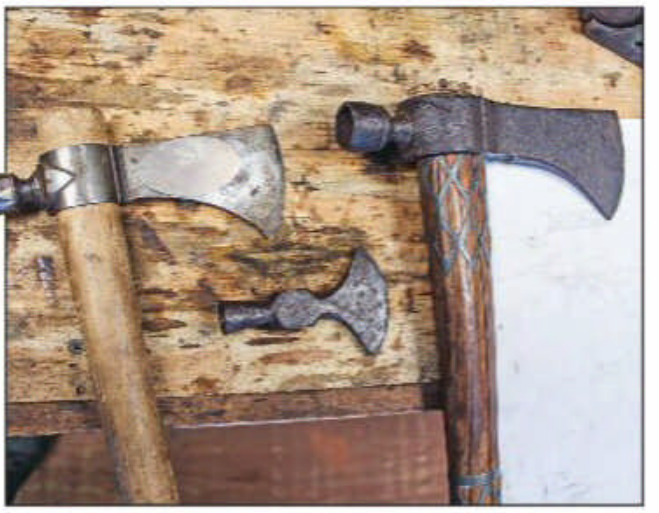
The historically inspired details and faux aging of this rifle made the author (below) feel like he was handling a 250-year-old antique. Despite its length, it was light and fast to the target with a lock perfectly tuned for quick ignition.



hundreds of original pieces, they rediscovered much long-forgotten knowledge about the work of historic gunsmiths that they freely shared. The KRA and CLA are now mutually supportive.

Another problem was found in the original market for contemporary longrifles. The initial economic incentive to build modern historic muzzleloaders and all the accoutrements associated with them was driven by the needs of the newly formed National Muzzle Loading Rifle Association (NMLRA). The NMLRA was a shooting club with a significant historical re-enactment component. They created the market that encouraged people like Hershel House to become artisans and pursue historic trades. Ironically, the NMLRA also held back the true artists. The average member on a budget was looking for practical and affordable rather than beautiful. More people buy a Chevy than buy a Cadillac. If the best work of this contemporary generation of artisans was going to be accepted as fine art, Frank and Lally realized it needed to be lifted out of the dust of the outdoor rendezvous re-enactment encampments that were a regular component of the NMLRA bi-annual shooting matches held in Friendship, Indiana. That venue would be the annual CLA show, and Frank and Lally have served on the show committee since its inception more than two decades ago. The Woodbury School movement believes art must be treated like art.

In their fight for artistic recognition for themselves and their peers, Frank and Lally never strayed far from their own art, and that proved to be the key to a major breakthrough. It came in the form of a sculpture, an ancient art form well understood and accepted by the fine art world. Over a period of three years, they conceived and built a multimedia sculpture of a Native American (titled Nechasin). They used bone, ivory and wood for the body, and clothed and equipped him with meticulously researched, designed and made objects typically used by a warrior of that historic time and place. The objects included hand-woven and sewn clothing, a knife in a porcupine quill work-decorated sheath, a gorget and armband, body jewelry and, naturally, a rifle. Each object was a work of historically inspired original art in itself, and their combination into a larger sculpture made a very eloquent case for the credibility of all CLA artists.





Antique and contemporary tomahawk heads in the making, and a scrimshawed powder horn Hershel made decades ago.

★ A True Family Affair

All the Houses support the arts. When they are not creating, they are generally sharing their skills and knowledge with others and encouraging them to create. John House followed Hershel and Frank into the art world in 1990 but directed most of his efforts into knife making. He is a master at the forge and anvil. During the instructional seminars the Houses conduct each year, he can be found with hammer in hand guiding students in the shaping of red-hot metal.

From the start, the preservation and perpetuation of the art forms through the cultivation and training of new artists was a major objective of the Woodbury School movement. There was a grant for Hershel to take on an apprentice and a National Endowment of the Arts grant that allowed him to make the finest rifle he had built up to that time. The Houses have been instructors in the NMLRA longrifle-building seminar held at Western Kentucky University for most of the 30-plus years it has run, with no plans to stop. Frank and Lally spend half their time working with the CLA Foundation and lecturing to various organizations inside the art and history communities.

The Woodbury School movement began with Hershel House's stubborn, unapologetic creativity and reverence for simplicity. It was nurtured and developed into what it is today by the work of Frank and Lally House. In the words of Frank House, "Damn the torpedoes, your work is what's important...not money, not accolades...just knowing in your heart you have created something wonderful and it really doesn't matter what it took to birth it. That's the Woodbury School."

To receive more information, visit housebrothersproject.com. ★





A frontier-style, hand-forged hunter's knife and sheath. The touch marks (inset) identify this as a contemporary creation, not an antique.


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TOP 10 OUTDOOR SKILLS

Must-have knowledge for enjoying the outdoors to its fullest

BY THOMAS RAY



THE finest outdoor equipment in the world is of no value if you don't know how to use it properly. Knowledge of key outdoor skills and when to pull them out of the bag trumps the best gear every time. Here are 10 indispensable skill sets for anyone wanting to be fully prepared for adventure in the great outdoors!

Firecraft

Firecraft is the art of starting, building and maintaining a fire. Knowledge of this skill could be as critical as getting warm after a winter soaking when miles from camp or as mundane as knowing how to bake biscuits in a reflector oven. Knowledge and use of fire and cutting tools are probably the two most critical skill sets in the true outdoorsman's arsenal. After all, these two things are the reason that human beings are on the planet today.



The ability to quickly build a fire is a lifesaving skill.

Obviously, the first thing to know is how to start a fire. This begins with knowledge of the fire triangle, tinder sources and various ignition methods. Ignition can be accomplished using a variety of means: Friction-based, spark-based and chemical-based methods are all possibilities.

Also important are the various woods and their properties regarding cooking, warmth, signaling and other uses. For example, poplar boils liquids fast. Locust, chestnut and oak burn clean and hot. Pine stumps contain lighter wood, rich in turpentine, that will burn even when wet. Educate yourself by reading, experimenting and taking it to the woods.

Hygiene And First Aid

Ever wonder why the military pays so much attention to neatness (short haircuts and dressed boots, for example), inoculations, dental care, staying in shape and taking care of your feet? It is because they know that personal hygiene is critical to battlefield effectiveness. It's the same for the outdoorsman. The backcountry is no place to have a health crisis. Small issues can become big problems fast. Things such as blisters, chafing, rashes, insect bites, cuts and scrapes must be prevented or dealt with quickly, otherwise they can be debilitating.

Likewise, a knowledge of basic first aid is important, not only for you, but also for others in your party. What if someone breaks a leg a day away from help? Would you know what to do and exactly how to do it? Sitting at home and watching a video does not take the place of proper hands-on training. You owe it to yourself and those you love



Even basic first-aid items can promote cleanliness and healing from minor injuries while in the bush.



Courtesy Remington Art Museum

to take courses in basic first aid and cardiopulmonary resuscitation (CPR). If you ever need them, you will be glad you did.

Water Procurement And Treatment

Do you know when water is usually safe to drink without treatment? Do you know when or how to properly use filters, disinfecting tablets, or both? Do you understand where to seek water in arid environments? Water is life—literally. A huge portion of our body is composed of water, and dehydration is an everyday threat to humans, even in cities. It is hard to quantify water needs because every person and situation is different. It's a good rule of thumb that the darker your urine, the more dehydrated you are. Stay hydrated: Once one feels thirsty, the body might already be experiencing up to 1- to 2-percent fluid loss.



Modern filters make it easy to purify most water from the wild.

Backwoods Navigation

Sure, GPS is great. Be knowledgeable in its use. However, what if it stops working, the batteries die or you drop it into a river? You might not always have it. A traditional compass is simple technology: It always works, and it is usually reliable unless you are in an area with unique geology that affects its accuracy. Map reading and/or compass skills can help you identify where you are so that you know where you are going. Using a GPS will never take the place of being able to look at a map and "see" the terrain in your mind, knowing



Map and compass skills are an absolute necessity for wilderness travel.

how to use landmarks, or dead reckoning. These are indispensable skills if you really need to navigate off-trail. Knowing how to improvise a compass (with a wristwatch, for example) when you don't have one should be a skill in every outdoorsman's bag of tricks.

Dealing With The Extremes

What if you are caught out overnight in a snow squall or rainstorm? Could you quickly and efficiently build or improvise a shelter to protect yourself from discomfort or hypothermia? Better still, do you understand weather lore well enough so that you could be prepared for such a storm well before it strikes? There are



Being able to read weather from natural phenomena could help you avoid danger and inconvenience in your outdoor pursuits.

many shelter-building options, including lightweight emergency shelters that you can carry when you don't have a tent. Even more valuable is the knowledge of nature that will allow you to predict and avoid dangerous situations.

It is also important to recognize clothing as integral and important outdoor gear and not just something you wear on your back. Knowing how to choose clothing for a particular climate, trip and set of conditions, and how to effectively layer, is vital to your comfort and safety in the outdoors. Educate yourself on the many technologically advanced products that are available.

On the flip side, never underestimate the value of a simple, multi-purpose item like a trash bag!

Camping Well

Ironically, many park personnel do not look favorably on campers because bad campers create extra work for them in the form of bad behavior, damage to resources, litter, irresponsible wildlife encounters, injuries and even death. Knowing how to camp well is an indispensable skill. Important knowledge includes knowing how to choose a campsite and keep it clean, protect limited resources (an understanding of Leave No Trace prin-

EIGHT GREAT SKILLS BOOKS

★ **Firecraft:** *The Book of Camp Lore and Woodcraft* **by Dan Beard**
Every skill you ever wanted to know about related to Woodcraft and traditional outdoor skills with a multitude of illustrations by the author. There is a ton of information here on fire making and maintenance.

★ **First Aid:** *American Red Cross First Aid and Safety Handbook*
This is an all-time classic. Be sure you get the latest edition for the most up-to-date information, and also be sure to take a course.



★ **Maps and Compasses:** ***Be Expert with Map and Compass*** **by Bjorn Kjellstrom**
This is the manual for the baseplate compass! It's a must for all outdoor libraries.

★ **Weather:** *Finding your Way in the Outdoors* **by Robert L Mooers, Jr.**
This book provides great information about finding routes, weather lore and many other outdoor skills.

★ **Knots:** ***The Complete Visual Guide: A Practical Step-By-Step Guide to Tying and Using Over 100 Knots*** **by Des Pawson**
All the knots you need and then some are found in this fun book.

★ **Animal Lore:** *Trapping North American Furbearers* **by Stanley Hawbaker**
Although it is a bit dated, this book contains much useful information on animal lore, behavior and trapping.

★ **Camping:** *Camping in the Old Style* **by David Wescott**
(new edition with contributions by Steven Miles Watts)
Here, you'll find everything you need to know to camp well in the classic style and beyond.

★ **Backpacking:** ***The Ultimate Hiker's Gear Guide: Tools and Techniques to Hit the Trail*** **by Andrew Skurka**
Everything you need to know for lightweight backpacking from the modern-day expert can be found in these pages. It's a great guide for all skill levels!



Proper precautions in bear country include the use of bear lines.

ciples), find wood, safely use fires and stoves, avoid wildlife, pitch a tent, get a good night's sleep, courteously use trails and other skills.

Blade Smarts

Axes and knives are indispensable tools for the true outdoors person. Many tasks can be accomplished with just a knife—many more with the addition of an ax. With them, a paddle lost in a wilderness dunking can be replaced or a shelter built to wait out bad weather.

A knife is an everyday tool with countless uses, from cutting tent rope to skinning game or preparing food for meals. Choosing a knife is a personal decision, again based in part on expected use and the personal preferences of the user.



A combination of tools for the wilderness consists of a multi-tool for fine work, a sheath knife for less precise tasks, and an ax or hatchet for heavy jobs.

Axes should be chosen with the job in mind. A general rule is the further away from civilization, the bigger the ax. Whether ax or knife, to be useful and safe these tools must be kept sharp and in good working order. If you weren't lucky enough to grow up learning to use them, training is available.

Hunt, Fish, Trap And Forage

It would be hard to spend an extended period in the woods or wilderness without knowledge of how to hunt, fish, trap, forage and process game. I grew up learning about and doing all of these things. Again, if you didn't have this opportunity to learn about



Firearms provide a huge advantage when defending or feeding oneself or family.

procuring and processing wild food but want to now, training is available through hunter safety courses and other arenas.

Firearms are tools where proper training becomes a matter of life and death. Learn how to shoot accurately, strive for a clean kill, and always abide by all safety rules and regulations. A knowledge of plant and animal lore is essential for success in hunting, fishing and trapping. A variety of literature and courses are available.

Using Knots



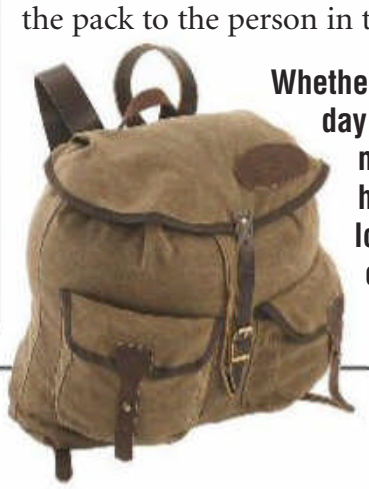
The taut-line hitch is a go-to knot for the outdoors.

Using knots and lashings is another incredibly useful outdoor skill. You'll use them to put up tarps and tents, hang bear bags, tie up boats and canoes, lash shelters together and tie loads onto cars and trucks, as well as for many other purposes. As for training, this is an easy one. There are tons of instructional videos and animations online. It also never hurts to have a primitive equivalent in your skills arsenal, such as improvising lashings from appropriate plant materials, such as hickory withes, when building a shelter.

Master The Art Of Travel

Being able to travel well is a skill unto itself. Much is rooted in being prepared and proper and efficient packing. The rest is attitude and realizing that the journey is just as much a part of travel as the destination.

How to properly pack and use a backpack is a critical skill, as is fitting the pack to the person in the first place.



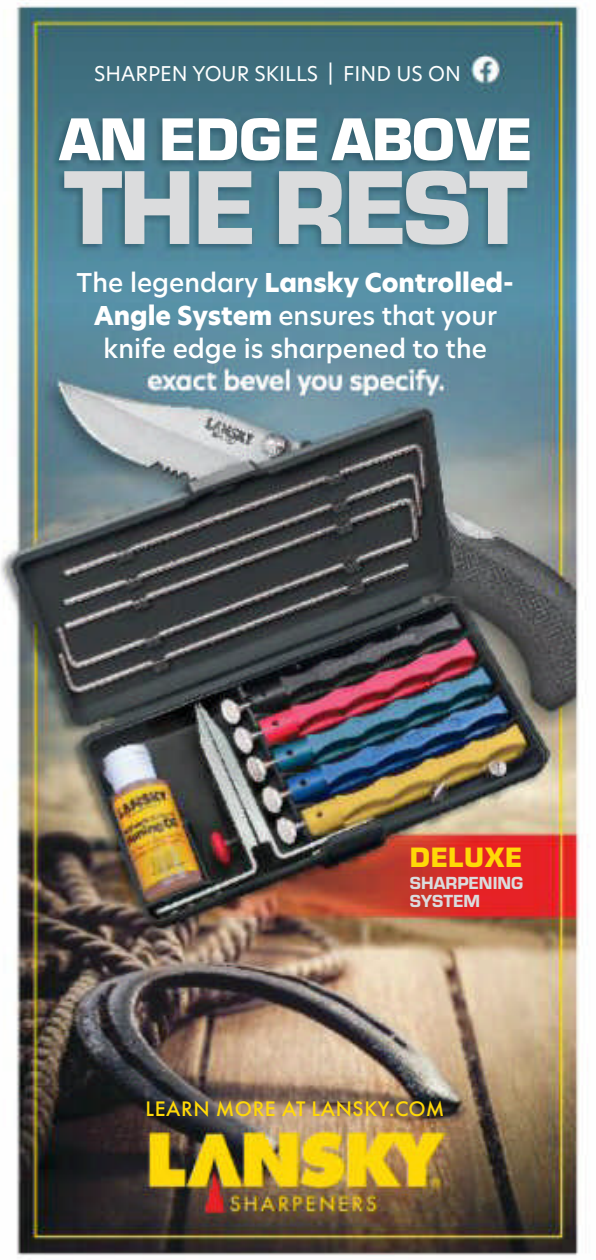
Whether preparing for a day hike or an overnighter, knowing how to properly load your pack can make all the difference.

Knowing torso length (the measurement from the C7 vertebrae in the neck to the iliac crest) is critical to a proper fit. Make sure you are getting the right size pack before any purchase.

BONUS SKILL: Make Your Own Tools and Equipment

Making your own gear by hand not only saves money, it also gives you knowledge and patience—important outdoor skills in their own right. Leatherworking to make a knife sheath, blacksmithing a hook or fire striker, sewing, tanning deer hides or making a bow or an ax handle, are activities that do not end with the finished items. Now you have the knowledge and ability to make more! Confidence grows along with your skill level, leading to more knowledge and the acquisition of more complex skills.

Practice your skills, go to the woods and never stop learning!



Mission Possibles

How to craft your own simple backwoodsman's pouch

BY MARK HERWIG

The nomadic lifestyle of frontier Native Americans, Euro-explorers and, now, today's adventurers demands a practical way to carry everyday needs on your person. Thus was born the "possibles bag," an over-the-shoulder leather bag to carry all sorts of things to make your day's activities possible.

We know this was done early in North America because of a statement by Hidatsa tribal member Buffalo Bird Woman (b. North Dakota 1839-1932) in a 1917 book by Gilbert L. Wilson.

"In olden times every warrior carried a bag of soft skin on his left side supported by a thong over his right shoulder; in this bag he kept needles, sinews, awl, soft-tanned skin for making patches for moccasins, gun caps and the like… In the bottom of this soft-skin bag the warrior commonly carried…sunflower seed balls (mapi') wrapped in a piece of buffalo heart skin."

Like those nomads of days gone by, I am an outdoorsman and need something to carry my gear, but a backpack or fanny pack wouldn't do. I own and manage 44 acres of forested hunting land near the southern tip of Lake Superior in the Arrowhead country of



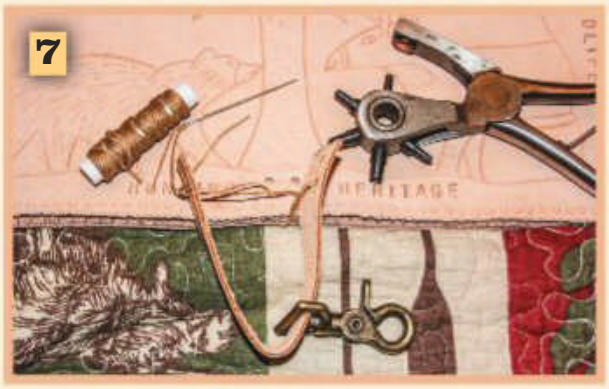




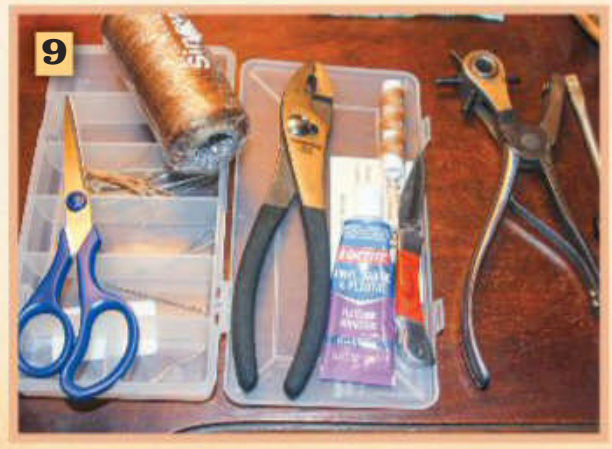












1-5) With punch and leather secured, draw design on parchment paper, transfer and dampen leather. 6) Decorate with stamps. 7-8) Hold leather with chip clips for carving. (9-10) Tools and the finished product.





northern Minnesota. I cut and maintain trails for grouse, woodcock and deer hunting and needed a bag to carry all my tools and other gear.

It was very awkward to carry a branch clipper, tree snipper, canteen, pistol (there are a lot of big bears and wolves around) and other items stuffed into my pants pockets and belt. It was cumbersome and dangerous.

So, as a leather worker, I decided to make my own possibles bag!

Make a Pattern

My first suggestion if you've never done leather work is to find a local leather store. I go to Tandy, and many Tandy stores offer free classes or a hangout table where folks drop in to work, share and chat. Tandy staff are also very helpful, and they even have experts come in to teach free classes on Saturdays.

First, make a pattern using paper grocery bags. It's much cheaper to make mistakes on paper than expensive leather. Use bag clips to hold the pieces together so you can better visualize the bag. Once everything fits together the way you want it to on paper, start cutting the leather.

Customize It

Since I was making a possibles bag for a specific purpose—cutting/maintaining forest trails—I came up with some innovations. You should do the same to fit your purpose.

I made two separate loops for the back of my bag to carry both a branch clipper and tree snipper. Most importantly, and this is what gave me the bag inspiration in the first place, I attached a swivel snap to the bottom rear of the bag so I could attach it to a rear belt loop. This keeps the bag from constantly flopping forward every time I bend over or run into a bush. Even walking movements did the same thing.

Before the bag, my large, heavy canteen, which was slung over my shoulder, would fall forward every time I bent over to nip a low branch or a small tree. The tools in my belt would also fall out of place. I sometimes cut trails for three or four hours at a time, so I had to do something.

Also, remember to make a place to receive the bag carrying strap. I just stitched on two leather loops and used a stout fiber rope for a strap.

Tooling

Before stitching everything together you might want to personalize your bag by tooling. Again, a class will help, and you'll need some specialized tools. Just a few will do at first, and they're not expensive. Again, use paper, but this time parchment paper from the kitchen, to work up your design. Parchment takes pencil well, but more importantly erases well. You'll make some mistakes, so this is important. Parchment also holds together well when tracing on dampened leather.

Draw a border on your leather using a stylus and swivel knife to delineate the space where you want to tool. Then lay the parchment over the leather and trace the lines on the paper. Next, draw a design freehand on the paper. Keep it simple, and leave room for a few leather stamps, too. These inexpensive metal stamps come in many figures and designs.

Our frontier ancestors personalized their gear as a way of identifying themselves and expressing their beliefs. It's meaningful to continue this American tradition.

The real key, and magic, of leather tooling is that you wet the leather first using a household spray bottle so it takes the tooling. When you're done, the leather dries perfectly as if it was never dampened.

Stitching and Staining

Before staining, stitch your bag together using leather needles and artificial sinew. This stuff is really strong and holds tight.

I love Eco-Flo "Bison Brown" stain because it gives that rich, chocolate brown color that is so classic. It applies evenly, too, and since it is water-based, it cleans up easily.

Use a leather finish on your bag to protect the stains from smearing in the rain. Also, I sometimes "stiffen" my bags by either putting a piece of plywood on the inside bottom or stapling a piece to an internal side.

Wrapping Up

Our frontier ancestors knew what they were doing when they made and used possibles bags. So, whether you're making a bag for hunting, hiking or cutting trails like me, you'll find them much more functional, convenient, comfortable and accessible than an unwieldy frame backpack, small fanny pack or, heaven forbid, your pants pockets and belt! ★

BLENDING FOR 'YOTES

Score more fur by ignoring eye appeal and disguising your sets better

BY RALPH SCHERDER



Coyotes are naturally cautious animals. By late season, they've usually encountered traps and have become shy of dirt patterns. That's when it's time to start blending traps.

Trappers are taught that eye appeal is everything. Yes, eye appeal at a set can grab the attention of a coyote, but it can also have the reverse effect, especially in areas that receive a lot of hunting or trapping pressure. Your catch might be good to start the season, but once coyotes start associating a big hole or a dirt pattern with danger, you'll soon wonder where all those coyotes went. Truth is, they're still there; they're just avoiding your sets. That's when it's time to get sneaky and start blending your traps.

Choosing A Backing

Blending traps all begins with the type of backing you used to make the set. Most trappers, if they don't find what they need in the exact place they want to make a set, import a rock, stick or something else that has considerable eye appeal to use as a backing. In theory, a good backing will force a coyote to work the set from a certain direction, but that's not always true. More often, a coyote approaches a set from a downwind direction. If they're curious enough to work the set, they might move around to get at the source of the lure or bait.

For years, I've placed trail cameras at sets trying to get footage of how coyotes approach. I've even run cameras during the offseason, pointing them at a rock or stick with a lure on it just to see how they work these items. What I've found is that coyotes are neophobic critters: While it's true that anything new can catch their attention, it's not always in a good way.

The addition of "foreign" objects—in most cases, a rock or stick that I intentionally placed somewhere for its eye appeal—sparks caution more often than curiosity. Time after time, coyotes will approach the object, sometimes circle it, muscles tense, and only after great consideration will they approach, work the object and then move on. The time actually spent up close to the object and whatever lure I put on it is mere seconds.

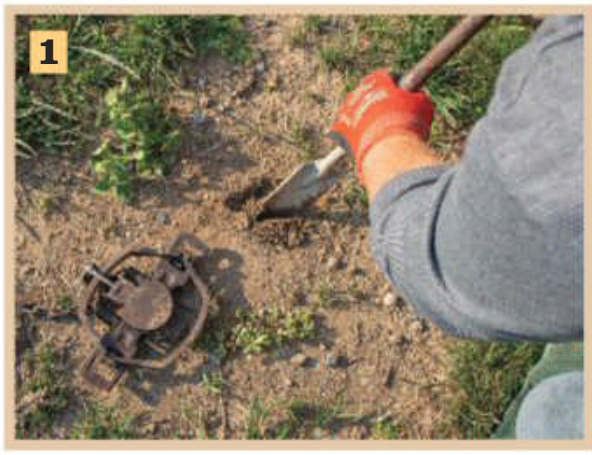
However, when I use a backing that is already on-site, such as a small clump of grass, I've noticed that coyotes approach with confidence and they'll spend more time trying to get to the source of whatever lure or bait I placed at the set. They are more comfortable because that clump of grass belongs in that field. It blends in with the surroundings. It's natural.

Eye appeal is a relative term. Eye appeal can be as simple as overturned blades of grass or a dark area where the





(Left) Attention to detail is what separates great trappers from merely good ones. A few extra seconds spent to properly blend traps makes a big difference. **(Below)** A finished set should be practically invisible.

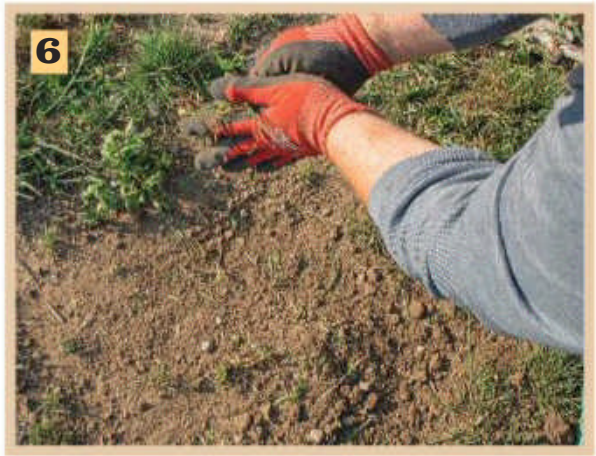




















1) Knowing your equipment will help you make sets and blend them more quickly and efficiently because you'll know exactly how big to dig the trap bed every time. 2) Where soft enough, simply pull the loose dirt toward you to create a place to set the trap. 3) Place the trap in the bed and give it a slight turn to stabilize it. 4) A small stick stuck in the dirt on the outside of the dog serves as a good marker once the trap is covered. 5) Push loose dirt back over the trap to cover it. In rocky or clumpy soil, a sifter comes in handy. 6) Rubbing grass and weeds between your gloves loosens up particles that can help blend in the set. Use whatever is available at the site to help make your sets disappear. 7) A handheld brush can be used to sweep a light layer of duff from the outer edges onto the fresh dirt. Always sweep toward sets rather than away from them. 8) Hay particles also make great trap coverings and can help give the set a weathered appearance. 9 and 10) Once the set is complete, use a small rebar stake to punch a hole for the lure and bait.

earth has been freshly dug or roughed up. These subtleties, usually unnoticed by us, are highly attractive to canines. Once I grasped this concept, I started looking at eye appeal at my sets in a whole new light. I realized that the real appeal is the lure and bait, and with no visual distractions, these scents do their jobs better because the animals now approach the set much more relaxed and curious, rather than suspicious. In essence, that's what blending is all about.

Keeping your work areas small and clean is a major key to making your sets disappear. This begins with streamlining your equipment. Even though there are many different brands and sizes of traps available today, find one specific brand and style that you have confidence in and build your system around that particular trap. Once you get used to working with one trap, you'll start to develop what professional trapper and lure maker Mark June calls "muscle memory." In other words, you'll inherently know exactly how big to make the trap bed, how to anchor and stabilize the trap, and how to blend it in without even having to think about it.

My set construction sequence is the same no matter where I'm trapping. Once I've decided on a location and found my backing, I start by digging a bed that is barely big enough to accommodate the trap. The less ground that's disturbed during set construc-

tion, the easier it will be to blend the site back to a somewhat natural appearance.

Excavated dirt is placed in a metal sifter off to the side of the set and will be used to cover the trap. Sometimes, such as when trapping in sandy or soft soil, you don't need any tools at all to dig and can just scoop out a sufficient amount of dirt for the bed with your hands. In these places, you don't even need a sifter and can just pull the dirt toward you in a little pile.

Next, I place the trap in the bed with the loose jaw facing toward me. I then give the trap a slight turn in the bed and pack dirt around the jaws to stabilize it. If I've constructed the trap bed properly, very little packing will be necessary.

A neat little trick I learned from Mark June at his Predator Trapping Academy is to poke a tiny stick or weed in the ground up against the dog on the outside of the trap. This serves as a great marker so that you always know the position of the pan once you start blending in the set and adding the lure and bait.

I sift just enough dirt to cover the trap and feather out the edges so there are no hard lines to indicate where I've bedded the trap. In dry, sandy soil, I simply push the little pile of dirt back over the trap and lightly tamp it down with my palms, careful to level out any bumps or tiny ridges. I also pick out any rocks or twigs that could clog the levers or prevent the jaws from closing completely. When the dirt pattern is clear, I then make a small hole with the end of a rebar stake or poker and apply my lure and bait.

The direction in which you blend a set is very important. Most trappers have a tendency to start in the middle and work toward the fringes. However, you'll pick up a few more of those extra-shy coyotes by starting at the fringes of the set and working inward. A small, handheld brush comes in handy here and allows you to sweep some of the duff from the outer edges back toward the middle of the set, just enough to blend in some of the soil that was churned up during the set-making process. This also gives the set a slightly weathered look that is very appealing to coyotes.

> **"Coyotes are neophobic critters: While it's true that anything new can catch their attention, it's not always in a good way."**

What I use to blend the set depends on the location. If it's in a grassy field, I'll pluck a few blades of grass from around the set and sprinkle them over the dirt pattern. If I'm trapping in mountain country where there are lots of pines, I'll use needles and other litter to help camouflage the set. Sometimes I even use my sifter as a grater and rub moss against it until I work loose enough particles to blend in the dirt pattern.

I often carry a container of waxed sand or dirt, depending on the type of soil I'm













1 and 2) In this case, a log that was already on site was used as a backing, and the soil was sandy enough to scoop out a good trap bed. 3) Waxed sand or dirt can come in handy when making and remaking sets. It provides enough extra dirt to make blending easier in any conditions. 4) My lure is added to the backing to top it off. 5) The finished remake is just as blended as when it was made. Combined with the scent left around the set by the previous catch, this set will continue to produce results.

trapping in, to make and remake sets. This really makes blending easier in rocky country such as old strip mines. Once I've covered the trap with the waxed dirt or sand, I can quickly feather the edges to blend in the set and use old leaves, grass and other ground matter to make the set virtually disappear.

When I'm done with the set, I try to spruce up any of the grass I've flattened while kneeling at the site. Using a knee pad helps limit the amount of scent you leave on the ground when making the set and also comes in handy for brushing over the grass once you're done and ready to move on.

When To Blend

Early in the season, before hunting and trapping pressure makes coyotes more cautious, a distinct, visible dirt pattern can be very effective. It doesn't take much to make them wise, though. It can be something as simple as an improperly bedded trap throwing dirt up into their faces as they approach a set, but it's enough to make them steer away from dirt patterns after that. Many times, those coyotes can only be caught by switching to more subtle tactics. Personally, I'd rather not give coyotes a chance to get skittish, which is why I make sneaky, blended sets from the very beginning.

It can be difficult to "unlearn" techniques that have been ingrained in us from early on. Many trappers rely too much on eye appeal because they lack confidence in set location. They feel they must pull animals to their traps from a distance. However, if you're relying on a visual attractor rather than your lure or bait placed in a great location to bring a coyote to your set, I guarantee you're missing a lot of coyotes. Regardless of anything you use at a set, location will always be most important. The closer you make sets to where the coyotes are already traveling, the more coyotes you'll catch. Period.

> "The less ground that's disturbed during set construction, the easier it will be to blend the site back to a somewhat natural appearance."

Parting Pointers

A common myth among trappers is that a set has to "age" a few days before it'll catch a coyote. A major reason for that, I believe, can be traced back to a coyote's neophobic personality. When they encounter a rock or log that wasn't there last time they made their rounds, it's as shocking as it is for us to walk into our living rooms and find the furniture rearranged. It can take a while for them to become accustomed enough to the change to want to work the set. Blending helps take a little of that new shine off of a set and give it a more appealing, weathered look, and coyotes will be more willing to work a blended set on their first pass through the area.

In fact, the more I blend my sets, the more appeal they seem to have to coyotes. Making my sets invisible has resulted in higher catch rates and more consistent success all season long. ★

FOODBEARERS

Don't knock it until you try it! Trapping can yield some delicious meals

BY JEFFREY MILLER

North Dakota spring mornings can be quite cold. Shrugging a bit deeper into my woolen coat, I was thankful there was no wind. The 27-degree air temperature would have felt even colder had the prairie wind been blowing.

After a short walk through the riparian forest near my homestead, I came across my first set. The previous evening, I had made an artificial castor mound out of river mud, molding it into a patty and applying lure. Hollowing out a shelf under the frigid water, I placed a foothold trap, attaching it to a cable leading to deep water. To complete the set, a dried goldenrod stalk had been threaded through the attachment clip on the trap.

The goldenrod was gone.

Steeling myself, I removed my jacket before reaching into the swift water. Feeling a heavy resistance in the deep water, I slowly pulled up the cable. A water-logged beaver popped out of the murky water like a cork. I was already envisioning a warm pair of mittens as I dried the animal off with the previous autumn's desiccated leaves. Even better, I could easily imagine my family and I sitting on the deck in the summer, dining on grilled beaver backstrap.

➤ Common Furbearers

Each year across the United States, a variety of fur-bearing animals are hunted and trapped. In North Dakota alone, there are coyote, red fox, beaver, muskrat, skunk, raccoon, badger, mink, ermine, fisher, bobcat

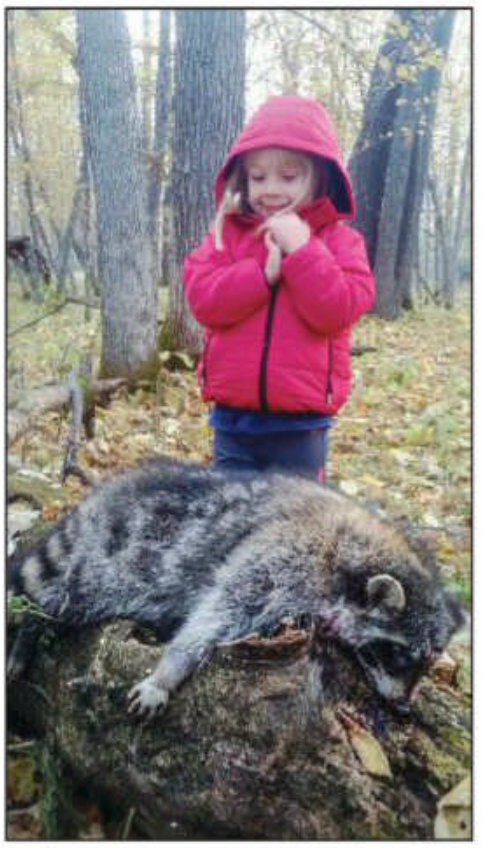








iStock Photo





(Right) My youngest daughter with a medium-sized raccoon, perfect for a barbeque dinner. (Far right) Cooked over applewood, this pulled raccoon meat is fresh out of the smoker and is a delicious taste treat.

and river otter. As bobcats do not live in the area I trap, I have not had the chance to pursue them. The remainder live around my rural home, and I pursue them with gusto each year.

Members of the mustelid family include the mink, ermine, fisher and skunk. While the meat of these animals is edible, particularly the skunk, I have never tried them for dinner. Short of a survival situation, I do not have any plans to do so.

Canines are edible, as well. However, the first thing a person notices when skinning a fox or coyote is the lack of fat. In order to cook well enough to destroy any parasite, the meat needs to be cooked well-done. Unfortunately, the lean meat would be rendered into something resembling a hockey puck, both in taste and texture. Again, unless I am starving, you will not find me dining on canine.

➤ Raccoon

There are three furbearers that are eaten in our home. Each one requires special preparation, both when skinning and butchering, to ensure the meat reaches the table in prime condition.

The main critter I pursue with steel each Autumn is the omnivorous raccoon. The first year I trapped, my daughters and I only put out a few sets, catching two animals. After pelting them, we disposed of the carcasses. Raised on a farm and taught a person should always eat what they kill, letting those carcasses decompose in the forest did not sit well with me.

> “Even better, I could easily imagine my family and I sitting on the deck in the summer, dining on grilled beaver backstrap.”

When the next trapping season rolled around, my girls and I set out a variety of sets, using a combination of foothold and dog-proof traps. Having learned how to tan and sew fur the previous summer, I was in need of quality fur. The first trap check yielded a pair of big raccoons. A little research revealed that after the turn of the century, raccoon meat was so popular it was sold in restaurants. I needed to see if I was missing something.

Removing the pelts by cutting around the hind legs and case-skinning was easy, but I was a bit stymied as I studied the carcass. The first thing I did was to change my rubber gloves. Touching it with dirty gloves would be a surefire way to get gamey and off-putting meat. It looked very much like a bear and having butchered one of those before, I felt confident in proceeding.

The front shoulders, while rather small, yield enough meat to make them worthwhile to harvest. I noticed a pair of glands, one on each side, under the front legs. They are about the size of a kernel of corn, greyish in color with a waxy texture. Since glands are used for scent marking, they had a strong odor. They were removed, taking special care not to puncture them.

The backstraps, even on a big raccoon, are thin, narrow and not worth the effort to remove. Conversely, the hind quarters are large and meaty. With a sharp knife, I cut each quarter free and twisted, popping the ball joint free. The four pieces of raccoon went into a large bowl full of water with a pinch of salt to soak in the fridge for the night. The soaking overnight rids the meat of excess blood.

➤ Raccoon Recipe

Raccoon can be a bit daunting to eat the first time. One of the first times I cooked dinner for my significant other, Melanie, I could see the trepidation in her eyes. After sampling it, however, she became a convert.

There are two ways I prepare raccoons. Both start out the same way, with a pressure cooker. The pressure cooker not only tenderizes even the oldest, toughest raccoon, but also allows for the meat to be removed from the bones. Raccoons are unique in that they have intramuscular fat. Removing the fat is easy after it has been pressure cooked, eliminating the off flavor the fat imparts on meat. The biggest pitfall most people have with raccoon meat is that it is “greasy.” The intramuscular fat is the cause of the grease. Thirty minutes at

15 pounds of pressure with some water in the cooker leaves the meat ready for the next step. The shredded meat can be mixed with bottled or "secret" barbeque sauce, ready for a sesame seed bun. The rich, dark meat lends a complex flavor to the standard barbeque sandwich.

Another favorite of mine is to place the cooked, shredded meat on a foil pan and put it in the smoker. Smoking at around 150 degrees with heavy apple-wood smoke for a couple hours completely changes the flavor profile. Friends and family would never guess the delicious pulled smoked meat they were eating was the masked bandit.

➤ Muskrat

Muskrats are rather small aquatic vegetarian rodents. While muskrat are trapped in open water across much of their range, in North Dakota we pursue them in the dead of winter. Trudging across thick ice in below zero temperatures seems rather silly for a couple-pound rodent. However, the soft fur makes amazing mittens, and the dark flesh is surprising on the plate. Muskrats have a long history of being eaten, and that tradition continues today, especially on the Delmarva Peninsula.

Muskrats are among the easiest of all furbearers to clean. Another animal that is case-skinned, the pelt peels away from the carcass almost as easily as a pair of socks after a long day. Sans hide, the meat appears almost purple in color. The front quarters are more bone than meat, so the hindquarters are the only edible portions of the muskrat. Similar to the raccoon, all the glands must be removed before eating.

➤ Muskrat Recipe

Soaking the meat in salted cold water overnight removes excess blood and prepares the meat for the table. A common thread in furbearer cooking is the pressure cooker, but muskrats only go in the cooker, set at 15 pounds, for 10 minutes. You do not want to remove the meat from the bones, only tenderize them. Once they are removed and cooled, a simple dusting in flour, sprinkled with a little black pepper, readies them for the frying pan. Cook them in a hot frying pan for 10 minutes or until done. The texture will be reminiscent of a chicken leg, but the taste will be much richer. My family loves the legs drenched in buffalo sauce.

➤ Beaver

Beavers are the most toothsome furbearer, in my experience, on the table. Even squeamish folks who would never dream of eating raccoon or muskrat will enjoy properly prepared beaver. Throughout the mountain man era, beavers were eaten, with the men of the Lewis and Clark expedition preferring it above all other meat in the Missouri River basin.

Beavers are skinned differently than other furbearers. Rather than being cased skinned, they are open-skinned. After removing the feet and tail, the beaver is placed on its back. The skin is cut from the tail area to the chin and pulled away from the body. With a sharp knife, the pelt is removed, inch by inch. When completed, the finished pelt is oval shaped.









1) On the ice with a brace of muskrats. 2) Muskrats are an excellent source of fur and meat. 3) Muskrat legs ready for the pressure cooker. 4) Muskrat legs and chicken wings. Both are toothsome!

Beavers are stout, heavy animals. While a small one might weigh less than 20 pounds, big ones will bottom out a scale around 60 pounds, or in rare cases, even more. Both the front and rear quarters are large and meaty and should be removed using the same methods as the raccoon. Again, glands should be removed. Even though quarters have meat that is very good, the real treasures are the backstraps and liver.

➤ Beaver Recipes

To properly enjoy the backstrap, fire up the grill. I cut the meat into bite-sized cubes and season them in a steak marinade for an hour. With the grill around 350 degrees, the cubes are placed in a narrow grilling basket. Like fine beef, they are cooked rare. Even Melanie's mother, a woman who professed she would not touch beaver meat, enjoyed the grilled backstrap.

Another wonderful way to prepare beaver is by smoking. This is a technique best used for the quarters. Start off by soaking the meat in a marinade of olive oil and soy sauce, with some garlic thrown in for good measure. After an hour or so, remove the meat and pat it dry. Dust a favorite barbeque rub generously on the quarters. Place it in a smoker, heated to 250 degrees. Two to three hours of smoking is enough to impart smoke flavor. Remove the quarters and place them on a double-thickness piece of tin foil. After a healthy dousing of barbeque sauce, fold up the tin foil and place back on the smoker. After an additional three hours, remove from the smoker. When the tin foil is opened, the most beautiful, melt-in-your mouth meal is ready for the table. There is not a cut of beef in the world that would best smoked beaver.

If the smoked beaver and grilled backstraps are crowd-pleasers, my favorite cut of meat is a crowd-divider. For those who dislike liver, skip to the next paragraph. For those who enjoy the iron-rich meat, the beaver liver is truly world-class. After removing the surprisingly large liver from the animal, the gall bladder must be cut out. Do not puncture it, as bile will taint the meat. An overnight soak in salt water or milk will temper the liver and firm it up. Cut into thin strips, dredge it in flour and fry it with onions. Lacking the strong liver flavor of venison or beef, the liver has a mild, almost delicate flavor. For liver fans, it does not get any better.

➤ More Than Just Fur

Fur trapping is a wonderful way to spend time outdoors, understand nature and enjoy time with loved ones. The sustainably harvested fur can be fashioned into the world's warmest clothing. Do not stop at harvesting the fur, however. Properly butcher the animal, practicing cleanliness and use the appropriate cooking techniques. I am sure your freezer will begin to look like mine, with raccoon, muskrat and beaver meat residing next to the venison, waterfowl, upland game and fish. When I ask the kids what they want me to thaw for the night meal, it always brings a smile to my face to hear them say, "Let's have beaver!" ★





1) Melanie's son and I examining a spring beaver. He knows it will make a great meal. 2) Placing a beaver trap in the cold water. 3) Beaver front and rear quarter. 4) Beaver quarters with the rub ready for the smoker. 5) Beaver quarters out of the smoker.







PERFECT PEMMICAN

How to make the original fast food that lasts long

BY MARK HERWIG



Mike Del Rizzo Illustration



Seldom is there an account of native or frontier life that doesn't mention pemmican, that ancient, portable "nutrition bar" invented by native Americans.

Pemmican is a portable food made out of pounded meat and fruit bound together with melted fat. It was often packed for long journeys or hunting expeditions by people who didn't have Yetis or Amanas.

I have read about this famous concoction so much in the history books that I just had to make some for myself. I wanted to taste what so many others have tasted when they were on the move and unable to hunt for fresh meat.

Indian pemmican was quickly adopted by Europeans involved in the fur trade and other exploits. Polar explorer Robert Peary wrote in his 1917 book *Secrets of Polar Travel*, "Without

(pemmican) a sledge-party cannot compact its supplies within a limit of weight to make a serious polar journey successful." Their dogs ate it, too.

"What ya Got?"

Pemmican was made from whatever wild meats and fruits were at hand. The Indians used lean meat, as for jerky, and it was cut thin, hung to sun dry or staked by a fire. The meat and dried berries were pounded using stone mortars and pestles, then mixed with melted animal fat, which solidifies as it cools.

Native peoples used organ and bone marrow fat for their pemmican because of its fineness. I always save the snow-white organ fat from my deer because the birds love it. I've eaten marrow roasted in-the-bone. It is creamy, rich and good.

A Pemmican Recipe

• Use equal measures of meat and dried fruit, the Cree way. Cut lean meat into thin strips. I used antelope roast from an animal I bagged in Wyoming last fall, as wild game is naturally low in fat. Hang the strips from an oven rack to dry at low temperature, about 150 to 175 degrees, for about two hours. Spray the rack with PAM first and put aluminum foil underneath to catch drippings.
• Dry the "dried" fruit, too—the dryer the better for grinding. I used dried cranberries, which are native to North America and are very sweet and tasty.
• Once dry, grind both the meat then fruit in a blender until it is chopped fine.
• Mix the two ingredients with spices in a bowl. I used fine chopped hot pepper from the garden and a French fry salt/spice mix I like.
• Line a shallow pan with wax paper.
• Stir in melted fat, just enough to make the ingredients stick together. I used bacon fat because I love the flavor, but blander beef fat will set more firmly. Many wild game fats taste unpleasant.
• Spoon the pemmican into the pan and smooth it out. Set it aside to solidify. Once firm, form into tight balls using your hand. Wrap these in wax paper or, as some plains tribes used to do, stuff the pemmican into a bison heart sack—the original stone-age baggie!

> "Pemmican is good, rich food that will keep you in the outdoors game, whatever that may be."

Pemmican was often fried or added to stew along with flour, wild onions and dried potatoes (a plant native to Peru, by the way, not Ireland!).

I've made pemmican a few times to experience the legend of this widely used, historic food and to get closer to our frontier heritage. I wanted to know a little bit more of what it was like for a Lakota or mountain man to reach into a leather possibles bag for a quick bite to keep him going on a hunt, to make the trading post before dark or check a trapline before the wolves did.

Pemmican is good, rich food that will keep you in the outdoors game, whatever that may be. And this recipe is like eating sweet bacon bit balls.

After reading about pemmican so many times, it was great to actually make, smell and taste what everybody has been writing about all these years. ★

PEMMICAN BRIEFS

FOR THE LONG HAUL: At room temperature, pemmican can generally last from one to five years. In 2019, a successfully preserved pemmican and grain mixture from a 1906 U.S. Army Emergency Ration Pack was safely eaten. Unrefrigerated pemmican, like maple syrup, peanut butter and honey, doesn't rot because of its low water content.

WAR OF FOODS: Métis, northern plains people who were part native/part European, made bison pemmican to trade with North West Company posts. Pemmican was so important that in 1814, Red River Colony (located in Canada/North Dakota border country) Governor Miles Macdonell started the so-called Pemmican War with the Métis when he forbade export of the food from the colony.

TANKA TIME: If you don't want to make your own pemmican, buy some buffalo and cranberry Tanka Bars, Bites or Sticks from the Oglala Lakota Tribe, Pine Ridge Reservation, South Dakota. I bought some Tanka bars while pheasant hunting in that area and they are pretty tasty.



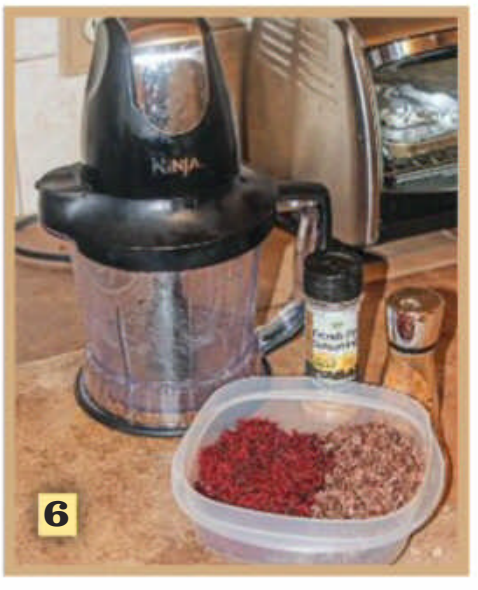
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1) Start with lean antelope meat and bacon fat. 2) Hang thin-sliced meat on a Pam-sprayed oven rack. 3) Dried meat and cranberries are ready to grind. 4) Meat, fruit and spices are assembled. 5) Grind the meat and fruit separately. 6) Good drying helps produce a good grind. 7) Add melted, but not super-hot, fat to the meat and fruit. 8) Pour the mixture into a waxed paper container, pat smooth, let cool and store for later.


7


8

TREADING LIGHTLY

Three old and wise methods for packing SIMPLY and AUTHENTICALLY

BY CODY ASSMANN

Buschcrafting is a recent trend that still seems to be grabbing people's attention. The rise in its popularity comes at a great time in history. As technology makes our trips to the woods more comfortable and much easier, bushcrafters are keeping alive the traditional knowledge of the past. Renowned bushcrafter Ray Mears perhaps summed up bushcrafting best when he said his goal was to "learn to live in the woods, not just visit from time to time."

This is in stark contrast to most modern Americans' camping trips. For a simple weekend camping trip, many people pack coolers, tents, extra clothing, bedding, games and anything else that can fit in the camper. Simply put, when people go camping, they tend to bring a lot of stuff. That isn't necessarily bad, but these sorts of trips don't foster a high degree of wilderness skills and knowledge.

Life In The Woods

Woodsmen and frontiersmen of the past relied much more on knowledge than on stuff. Essentially, they met all the same needs as we do, but they knew how to create more things from nature. Another famous bushcrafter, Mors Kochanski, summed up this idea when he said, "The more you know, the less you carry." For example, shelter could be made from trees, and food could be gotten from digging roots or hunting. Frontiersmen knew that nature contained all the essential elements for living, so they just had to find the resources and use them. The people who lived this philosophy in its purest form were the many tribes of Native Americans. They knew how to live completely off the land using only what nature provided. Frontiersmen often learned and adopted native ways and knowledge as they traveled the frontier.

That being said, most frontiersmen still took a few essential pieces of manufactured camp gear with them into the wild. They knew how a copper kettle or wool blanket could make their stay in the woods much better. This blend of manufactured goods and knowledge of the woods allowed adventurers like the mountain men, longhunters and voyageurs to live the lives they did. Longhunters, for example, lived in wilderness camps for several months at a time without resupplying. As they made their hunting treks for deer, they had to carry everything they needed on their backs. If they took too much, they would be overly encumbered. If they didn't take enough, their trek might prove disastrous. Finding the right balance was important.

One way that these men kept from taking too much gear was by keeping their packs small. Frankly, if you restrict yourself to a small and simple pack, you'll force yourself to create things from nature rather than haul them. If you're interested in learning how to replace more of your modern camping gear with things from the woods, try using one of these three primitive packs on your next camping trip.



The Blanket Pack









Wool blankets were common and very useful on the American frontier. One of the major advantages of wool is that it will insulate you even if it gets wet. Also, when combined with a fire or a primitive shelter, a wool blanket can really help make a night in the woods more comfortable. Another benefit is that blankets can be used to create simple yet effective packs.

All you need to make a blanket pack is a large blanket and a length of cord measuring about 7 feet. Start by spreading your blanket on the ground. Next, place the gear you want to take in the middle of the blanket about 6 inches from the top edge. You will need to lay your gear in a way that allows the blanket pack to be easily rolled. How you do this depends on the gear you're taking. You'll likely find out quickly that blanket packs don't accommodate a lot of gear.

Once your gear is placed at the top of the blanket, roll the top edge over. Now, fold the outer edges toward the center. While there is no rule for how far to fold, folding in thirds is most common. If you're using a tumpline, now is when you would lay it across the blanket.

After your blanket is folded in thirds, you can simply roll the blanket toward the other end. Keeping the roll tight will not only make your pack easier to carry, but it will hold your gear better as well. When you get to the bottom, you can make a small pocket with the tail end of your blanket and tuck the roll into that pocket. This neat little trick comes from a Mors Kochanski video and really helps lock the blanket pack tightly.

With the pack rolled, all you need to do is tie it shut. I like to use rawhide for cordage because it's primitive and wide, so when you carry it on your shoulder, it won't cut into your skin—unlike small-diameter rope. The easiest and best way I've found to tie the pack is by creating a loop in one end of your cord. Tighten down the loop and then wrap the cord around your blanket in the opposite direction. Next, wrap it around where the cord meets the loop and tie it off with a half hitch. Then, measure the length you want your shoulder strap to be. Keeping this length loose, tie off the other end of the blanket using the same system.

When you're done, you should have a pack that can be hung over a shoulder to transport your spartan camp from one location to another.



1) Start building the blanket pack by spreading it on the ground in front of you and placing your gear near the bottom of one end. 2) An example of simple camp gear transported with a blanket pack. Some fur moccasins, fur mittens and a kettle filled with a few essentials are all the author used on this primitive outing. 3) Packing with primitive packs takes some thought. A kettle can be used as an extra container to store some loose items. 4) Fold the bottom end of your blanket over the contents. 5) Next, fold in each of the sides about a third of the way. The exact distance is based on what is comfortable for your body size. 6) Once the pack is folded, just roll it from one end to the other, making sure to keep the roll tight. 7) Notice that I have come back around before tying off the cord. This creates a double wrap around the end of the blanket that tightly secures the end. 8) After tying off the near side with a half hitch, the author left a loose distance of cordage before tying off the other side in the same way. Use the loose section as a shoulder strap.

The Market Wallet

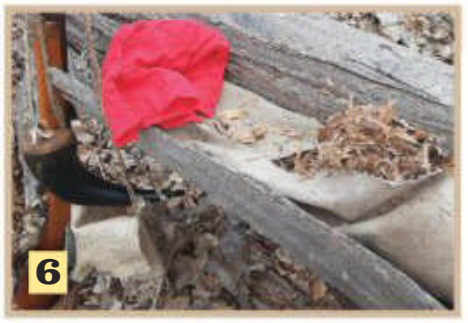
















1) Begin building your market wallet by laying it face up on the ground in front of you. 2) Fold the outer edges in toward the center. 3) Once the ends are sewn, sew up toward the center, stopping so you will leave a hole in the middle of the seam. 4) Turn the material inside out, and you're ready to go. 5) Use the market wallet to store odds and ends on a trip. 6) It's proven to be a great place to store tinder when you come across a good supply. 7-8) Roll it up, throw it over your shoulder and hit the backcountry.

Another simple pack that was used on the American frontier was the market wallet. While not generally boasting as much capacity as a blanket pack, the market wallet is good for day trips. This makes it a great option for people just wanting to experiment.

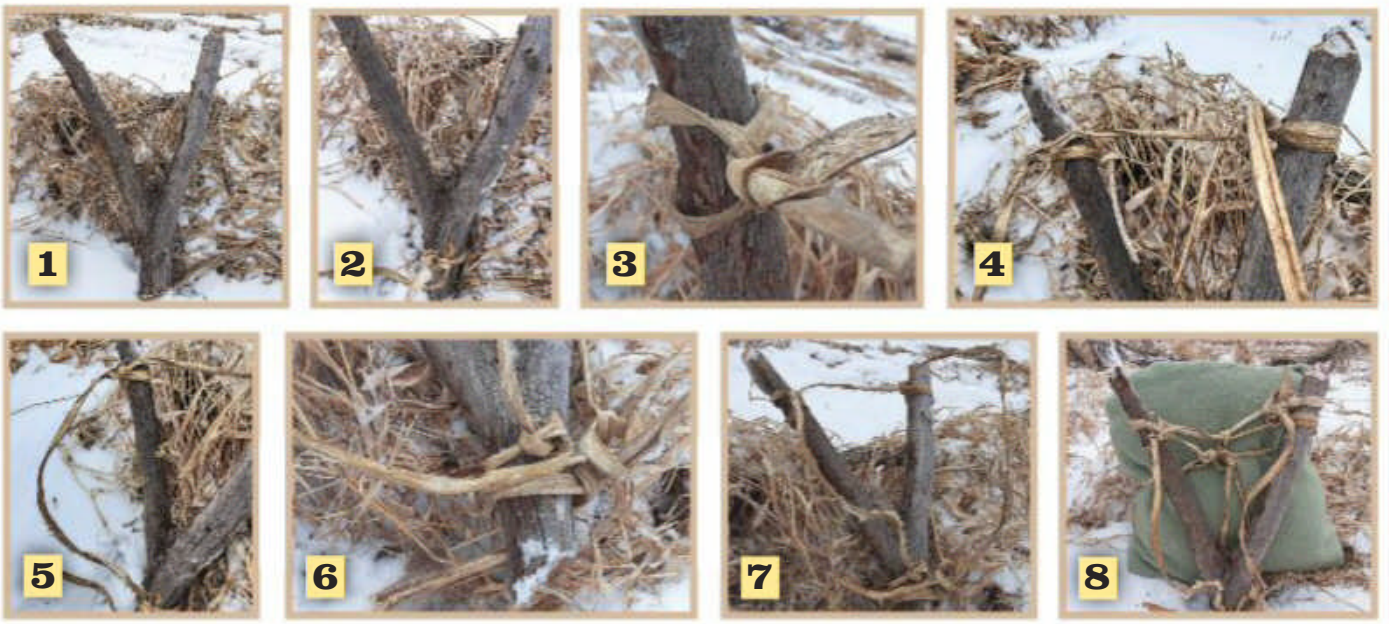
To make a market wallet, start by cutting a section of material you want to use. Traditionally, canvas was widely used, but this isn't essential. Cut your material in a rectangular shape, keeping in mind that your market wallet will only be half as wide as you cut it, but it'll be just as long.

Once your material is cut, you can start sewing. Make sure to work with your material inside out as you sew. Lay the material faceup in front of you, and then fold the outer edges toward the middle. Now you should be looking at what will be the inside of the wallet. Line up your edges and sew along the top and bottom seams first.

At this point, there should be a long unsewn seam running longways down the center. Sew this seam from the outer edge, working toward the middle. Stop and tie it off when you've gotten roughly one-third of the way up. Then switch sides and begin sewing from the other end of the wallet toward the middle the same distance. When done, there should still be a hole in the middle of the wallet. Turn the project right-side out, and you're done.

To use the market wallet, simply place your items into the pockets at either end. To avoid losing anything, twist the market wallet around itself to close the gap in the middle. Now, just throw it over your shoulder and hit the trail. These simple packs are great for a few-hour hike or an all-day outing.

The Y-Frame



1) Start the Y-frame pack by finding a good piece of wood. This fork is not too heavy, but is still strong enough to support the weight. 2) Begin lashing the fork by creating a loop that comes in on the bottom side of the fork. 3) At the top of one fork, use a half hitch to secure the cordage. 4) Tie the ends of both forks with a half hitch on each. 5) Notice the slack left in the cord. The length of this slack depends on your build and should allow you to comfortably wear the primitive pack. 6) Finish lashing the Y-frame, creating another loop that goes around the bottom of the fork. 7) The pack itself is finished and only needs the load to be strapped on. 8) A wool blanket can be substituted for the canvas pack. You can use this Y-frame to haul more gear than the other two packs described.

The final primitive pack comes from E.H. Kreps' book *Woodcraft.* Originally published in 1919, this small book is filled with useful information for those wanting to camp simply. Near the end of the book, a friend of Kreps' describes how to make the Y-frame pack that he used.

Start by selecting a stout limb that has a solid fork in it. Cut the limbs of the fork off at a distance suitable to the size you want. For the pack featured, the limbs are 16 inches long from the fork. Then, cut the butt end of the fork off (I cut mine to 9 inches). After smoothing any sharp points with your knife, the frame is complete.

At this point, you can take a length of rope and make a loop below the root of the fork. Next, at the top of one tine, use the same rope to make a half-hitch system similar to the one used for the blanket pack. Leave enough slack so you will be able to slide your arm and shoulder through this space. Make the same half-hitch system on the other tine. Finish off the pack by making another loop below the root. Again, be sure to leave enough slack so that your arm can slide through.

And with that, you have a simple frame to tie your gear to. In *Woodcraft*, Kreps describes lashing a canvas bag to the frame to carry his frugal camp. One advantage to the Y-Frame is that it could transport more gear than the two previously described.

Each of these primitive packs has seen use in the past. All of them are simple but still effective at transporting essential camp gear from one place to another. However, none of them will allow you to take a tremendous amount of gear with you. By keeping your pack small, you will force yourself to leave things behind. The more gear you leave behind, the more often you'll need to use only what nature provides. This approach is a great way to learn and exercise the skills of bushcraft and carry on traditional frontier knowledge. ★



TOP CHOPPERS

A review of new edged tools that can HACK IT ALL

BY GEORGE MCNEIL



Not quite a knife, not quite a machete. Or not quite a cleaver, if things are scaled down. In recent years, bushcrafters and survivalists have come to appreciate the advantages of knives, large and small, with blades shaped like small cleavers or machetes. The reasons are simple: They retain the slicing and shaving abilities of a knife and can also hack, be batoned with significant force and can even take down small trees if they're big enough.

Machetes and cleavers are both built to chop. But while the latter uses its weight against a hard surface like a butcher's block to accomplish its task, a machete must slice through organic material of various types, meaning the blades must be long, sharp and cut through the air as it does its work, but it must be robust as well.

Something interesting happens when you start scaling down the shapes of these two blades to knife-sized proportions. Not only do their similar chopping characteristics start to blend, you also start getting cutting tools that are perhaps more versatile than either of their larger forbearers.

»» TOPS EL CHETE



This is a big knife, or a small machete. Either way, it's a serious piece of steel.

While the blade is roughly machete-shaped, the hefty, thick blade makes the El Chete more of a long cleaver. This is the largest knife I've ever used that is actually a practical tool.

This thing is a chopper, pure and simple. While it's a bit too heavy and thick to use as a foliage cutter in most cases—at least, for too many swings—the excellent grind allows the thick blade to hold a shaving-sharp edge.

It's great for clearing branches, chopping through firewood and most tasks otherwise suited for a hatchet. The belly of the blade, which naturally is the striking surface when chopping with this knife, leaves the portion of the edge near the grip relatively unused so it remains sharper for more detailed tasks. And performing detailed tasks with the El Chete is totally possible and even comfortable.

During testing, the El Chete blasted through hardwood, and soft pine pretty much gave up as soon as the edge touched it. The weight and balance make it easy to swing with an impressive amount of force—it's just plain fun to chop stuff with this thing.

The wide spine also makes it great for batoning through thicker branches and even for splitting logs. Overall, it's a great tool for processing a moderate amount of firewood while being able to do lots more than a small axe or hatchet can. And while I didn't get to try it out, you could almost certainly use this thing to quarter a deer with ease.

The grip on the full-tang blade consists of two panels of layered Micarta and is designed to be easy to hang on to while swinging. You can attach a lanyard to the pommel in three different places, and the bit of steel jutting out from the grip can be used for crushing or breaking tasks thanks to the weight.

The El Chete comes with an excellent sheath made from formed polymer that's open on the spine side with grommets for lashing. MSRP: $300. (topsknives.com)

SPECIFICATIONS:

TOPS El Chete



- **Steel Type:** 1095 with an RC of 56-58 / **Blade Length:** 12 inches / **OA Length:** 17.5 inches / **Blade Thickness:** 0.25 inches
- **Finish:** Acid rain / **Handle Material:** Green and black canvas Micarta / **Weight:** 29.5 ounces / **Sheath Material:** Black Kydex

»» VARUSTELEKA TERÄVÄ SKRAMA

This crazy looking blade hails directly from Finland and is more useful than it looks, with a price tag that makes it even more attractive.

This knife is definitely a chopper that's more on the machete side of the scale than cleaver, though it has a cleaver-style hole in the blade. The tip of the Skrama has a more severe clip than the El Chete, resulting in more of a point.

It can be swung quickly and forcefully, making it feel more like an agricultural tool than other knives. It's great for clearing twigs and bark from branches, chopping small branches and most general slicing chores. In a pinch, it's even controllable enough to process game.

You'll notice the Skrama has a bizarre-looking grip that is almost as long as the blade itself. You can definitely swing it with both hands if you want to, but it's actually designed so you can grip the knife in two ways: close to the pommel for more chopping power and a greater swing arc, or choked up closer to the blade for more control and delicate work.

The blade is also plenty thick to baton, making it a solid bushcrafting tool and even a good splitter for small logs. If you look closely, you can see that the portion of the blade closest to the grip is ground at a more acute angle than the rest of the knife, giving you a sharper edge for more detailed work—something to be mindful of preserving when sharpening.

The actual grip surface is some kind of synthetic material that is just grippy enough, but not so much that it tears your hands up with use. It also absorbs impact really well and covers the entire handle all the way to the large lanyard loop at the pommel.



There are a few sheath options available for the Skarma at different price points and they're all serviceable. MSRP: $60 without sheath. (varusteleka.com)

SPECIFICATIONS:

Varusteleka Terävä Skrama

- **Steel Type:** 80CrV2 with RC of 59 / **Blade Length:** 9.44 inches / **OA Length:** 16.9 inches / **Blade Thickness:** 0.165 inches / **Weight:** 18.5 ounces
- **Finish:** Stainless or black oxide / **Handle Material:** Molded texturized rubber / **Sheath Material:** Polymer wrapped in leather

“In recent years, bushcrafters and survivalists have come to appreciate

»» SOG SOGFARI TANTO MACHETE

While this knife has the most “tacticool” looks of the group, it actually proved pretty useful in the field. It’s definitely more of a machete than a cleaver or chopping knife, as the blade is too thin and light to hack at sizable pieces of hardwood. But that thin, light blade makes it quick and easy to swing, and the tanto shape makes it easy for the edge to bite into brush and foliage. The sawback can make fast work of small to medium-sized branches for firewood. And yeah, it’s a sawback that actually works.



Of all the fixed blades on this list, the Sogfari is the lightest and easiest to carry. It is fairly compact and good at doing what it was designed to do. The handle is a full-wrap grip made of Kraton, which is a non-stick synthetic rubber that is resistant to heat, wear and chemicals. It provides enough cushioning to protect your hand and also lets you keep your grip when things get sweaty. The pommel of the full-tang blade has a choiled section that extends beyond the grip so it can be used as a “skull-crusher” or to smash anything else that needs smashing.

The sheath that comes with the Sogfari is adequate. It’s a shaped nylon affair that has a contoured mouth that makes re-sheathing the large blade easy. A strap with a hook-and-loop closure is there to keep the knife in place, but something with a blade this long doesn’t really need it. MSRP: $27. (sogknives.com)

SPECIFICATIONS:

SOG Sogfari Tanto Machete

- **Steel Type:** 3Cr13 / **Blade Length:** 10 inches / **OA Length:** 16 inches / **Blade Thickness:** 0.08 inches
- **Finish:** Black hardcased / **Handle Material:** Kraton / **Weight:** 13.5 ounces / **Sheath Material:** Ballistic nylon

»» GERBER VERSAFIX PRO

This compact machete is full of smart design features. The blade has a weight-forward shape and is also skeletonized with cutouts in strategic locations. Both help facilitate a swift swing with less effort.

On the spine you’ll find thick jimping near the front of the 9-inch blade. This is to give a baton more purchase when hitting the knife for more efficient strikes, making this a great option for bushcraft and firewood processing tasks. Plus, the full-tang blade ensures the knife/machete can handle it. On the grip end, the high-comfort handle is designed to reduce user fatigue and hotspots, and uses a unique high-durometer overmold for comfort.

The polymer sheath design borrows some features from modern handgun holsters. It’s extremely slender to reduce bulk and has a push-tab release activated by the thumb for easy deployment and rock-solid retention when sheathed. The sheath also includes a paddle-style belt attachment and several lashing points.

At 14.3 inches overall with a very manageable light weight and extremely affordable price, the Versafix Pro is ready for heavy duty. MSRP: $46. (gerbergear.com)



SPECIFICATIONS:

Gerber Versafix Pro

- **Steel Type:** Black oxide-coated stainless steel / **Blade Length:** 9 inches / **OA Length:** 14.3 inches / **Blade Thickness:** 0.20 inches
- **Finish:** Black / **Handle Material:** Polymer, rubber / **Weight:** 11.11 ounces / **Sheath Material:** Polymer

the advantages of knives...with blades shaped like small cleavers or machetes."

»» SPYDERCO ROC FOLDER

Something really cool happens when you downsize a cleaver-shaped blade even more to folding-knife size. It starts taking on the characteristics of other practical knives we use all the time—those toolbox staples, usually referred to as utility knives, with thin disposable blades. But with a thicker, meatier "cleaver-y" blade, something like the ROC becomes a powerful slicing tool.

The meaty blade can power through thick, dense materials, plus it can get clean cuts started easily with its extremely strong tip, which has a lot of steel behind it. And, that blade being VG-10 steel means this knife takes and holds a razor's edge very well. It's shape also gives the ROC's blade a lot of belly, making it great for making long slices with significant pressure.

The curved G-10 handle gives you a great grip even in wet conditions and allows you to make the most of the blade shape. An extended section of jimping on the blade's spine gives the thumb some extra purchase, allowing for a bit more control when using the knife for detail work.

The trademark Spyderco thumbhole makes the ROC easy to open with either hand. The liner lock is rock solid with no give or wiggle and is easy to disengage. The secure lock-up is due to a Bob Terzuola-inspired concave lock ramp on the blade's tang. The ROC features a reversible deep-pocket carry wire clip attached to the butt end of the handle for right- or left-side tip-up carry.

This knife is a lot more useful than it looks. If you have to cut through thick material often, with force, this is an excellent tool for such tasks. And in a pinch, it can do a damn good job chopping up vegetables at the campsite. It's also surprisingly good at delicate carving or whittling tasks, allowing for powerful, long slices that remove a lot of wood at once. I also wouldn't hesitate to field dress a deer with it. MSRP: $275. (spyderco.com)



SPECIFICATIONS:

Spyderco ROC Folder

- **Steel Type:** VG-10 / **Blade Length:** 3.07 inches / **OA Length:** 7.77 inches / **Blade Thickness:** 0.118 inches
- **Blade Finish:** Bare / **Handle Material:** G-10 / **Weight:** 4.2 ounces / **Lock Type:** Liner lock / **Opener:** Thumb hole

»» GERBER FLATIRON FOLDER

The shape of this blade resembles that of a straight razor more than a miniature cleaver, though it has a solid thickness that makes it feel like there's a tiny pry bar with an edge in your hand.

At 3.8 inches, the blade is fairly large for a folder and provides a lot of razor-sharp edge for maximum cutting power. The blade has a hollow grind and what Gerber calls a "stonewashed" finish that looks great and keeps the knife matte.

The Flatiron has a rock-solid frame-lock design and is outfitted with G-10 scales for a good grip in any conditions. The prominent finger choil keeps your grip solid. The folder forgoes a thumb stud in favor of an elongated thumb hole for easy one-handed opening with either hand. The pocket clip has one position, allowing for right-handed, tip-up carry only.

This knife isn't elegant, but it's simple and functional. If you have a job where you cut string, zip ties and boxes all day, this is a significant improvement over a utility knife. In the field, this is an excellent blade for most any cutting task you encounter. MSRP: $40. (gerbergear.com)



SPECIFICATIONS:

Gerber Flatiron Folder

- **Steel Type:** 7Cr17Mov / **Blade Length:** 3.8 inches / **OA Length:** 8.52 inches / **Blade Thickness:** NA / **Blade Finish:** Stonewash
- **Handle Material:** Canvas Micarta/steel / **Weight:** 1.66 ounces / **Lock Type:** Frame lock / **Opener:** Elongated thumbhole

THE PIPE

The right tool to strike

This might come as a surprise, but the amazing tomahawk in these photos isn't from a museum collection and wasn't made 255 years ago. It was made this year, exactly like it would have been made 255 years ago, by three artists in the Contemporary Longrifle Association. You can own it, too. It will be sold at live auction during the Contemporary Longrifle Association's (CLA) 24th Anniversary Annual Meeting and Show on October 30, 2020, in Lexington, Kentucky.

Piping Hot History

The tomahawk is as uniquely an American weapon as the Pennsylvania longrifle. In both cases, European settlers in the new world adapted existing weapons to their particularly American needs. Prior to contact with Europeans, the native Indians of the Northern

Presentation-grade pipe tomahawks were used as expensive diplomatic gifts or awards of recognition.


1


2


3



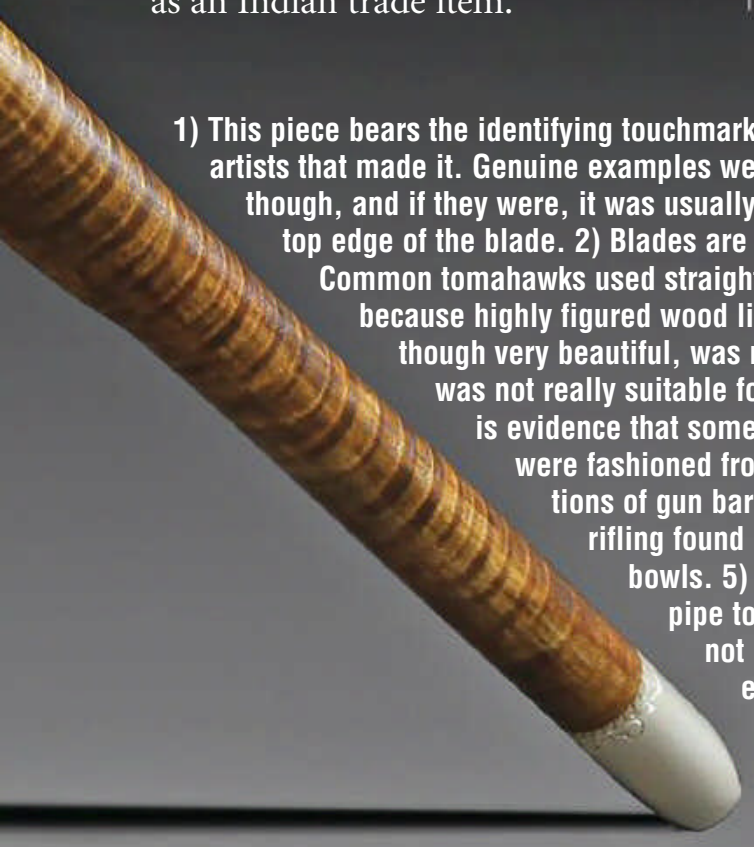
TOMAHAWK

your foe—or strike a deal

BY FRANK JARDIM • DAVID WRIGHT PHOTOS

Americas had no knowledge of iron and worked with tools of stone, wood, shell and bone. European bronze, iron and steel implements (knives, axes, saws, hoes, needles, fish hooks and guns) were highly valued trade goods. The metal tomahawk as we recognize it today was a popular weapon with European frontiersmen and Indians alike, but it first emerged specifically as an Indian trade item.

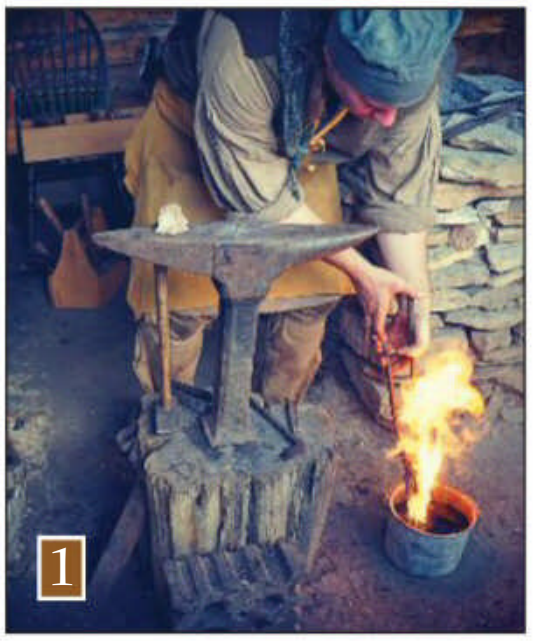
Unlike European hand axes and hatchets, which were primarily tools for cutting wood, Indian tomahawks were intended primarily for fighting, and, as such, were quite small and light with long handles. Most metal trade tomahawks, and in fact most all goods intended for bartering with the Indians, were imported to the British and French colonies in North America. They were efficiently mass produced in European factories and made comparatively cheaply. From the perspective of most Indians, any metal blade was superior to a stone one, so these tools were immediately and immensely popular. As long as metal items were high-value trade goods, it was certainly not in the interest of the colonists to freely share the knowledge of how to work hot iron and steel with the Indians. Also, for reasons of their own, of which there were many, the Indians



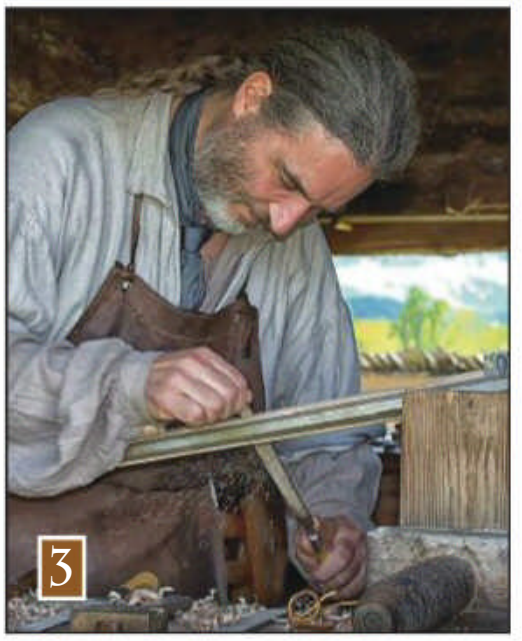
1) This piece bears the identifying touchmark stamps of the three artists that made it. Genuine examples were rarely marked though, and if they were, it was usually a signature on the top edge of the blade. 2) Blades are slim and light. 3) Common tomahawks used straight-grained handles because highly figured wood like this curly maple, though very beautiful, was not as strong and was not really suitable for striking. 4) There is evidence that some pipe tomahawks were fashioned from salvaged sections of gun barrels because of rifling found inside the pipe bowls. 5) A common trade pipe tomahawk would not have a beautifully engraved coin-silver mouthpiece like on this example.













1) Simeon England's years of research on tomahawks sparked the idea for the project. He hand-forged the iron head from a section of salvaged gun barrel. 2) Bladesmith Kyle Willyard at work in his Old Dominion Forge 18th century workshop. Also an experienced gun maker, he did all the decorative engraving and inlay on the head. 3) Master gunsmith Mike Miller, working here in period clothes, did the tomahawk's beautiful curly maple handle. Gunsmiths were the craftsmen with all the skills to make presentation-grade tomahawks. 4) The combined skills of the three artisans created a truly beautiful tomahawk.

were not particularly desirous to learn or pursue blacksmithing.

Prior to 1763, most tomahawks were the poll-end type with a stubby, flat, hammer-like head opposite the blade that served as a light hammer or to deliver a less lethal blow in combat. On the occasion of his capture by hostile Indians, the famous frontiersman Simon Kenton, a contemporary of Daniel Boone, was incapacitated when hit in the head with the poll end of a tomahawk. It punched a circular hole through his skull! Miraculously, he survived the injury, was adopted by the tribe and later left on good terms.

In most cultures, the quality, beauty and expense of one's material possessions serves as a visible indication of the bearer's social status. In 18th century North America, European colonists understood that a finely wrought and decorated sword was the weapon of an important military leader, not a common soldier. Likewise, the various tribes of their American Indian neighbors recognized that a finely wrought and decorated tomahawk was not the weapon of a common warrior. The CLA Auction tomahawk typifies the exceptional craftsmanship of the expensive, presentation-level pieces that were usually intended as diplomatic gifts for Indian chiefs or awards for respected gentleman officers in colonial service. The quality of the work is as high as the finest examples, the latter pieces simply having more decoration. Although perfectly deadly, this tomahawk is also a pipe for smoking tobacco. It has a hollow bowl end and a hole drilled through the handle to draw the smoke through. The 0.1875-inch hole through the length of the handle does not diminish its utility as a weapon so much as the highly figured wood itself.

From what can be drawn from the limited number of surviving written records and actual pipe tomahawks still in existence, these dual-purpose tomahawks began to appear in significant numbers after 1763 and the conclusion of the French and Indian War. They became increasingly popular as trade items through the Revolutionary War era when various ambitious adventurers, businessmen, royal officials and later the newly formed state and Confederation governments sought treaties with the Indians. Lewis and Clark took 50 fine pipe tomahawks with them on their three-year exploratory expedition that began in 1803.

As historically notable as they are, the exact origin of the pipe tomahawk is lost to time. The Indians enjoyed smoking tobacco, but it also had deep spiritual importance in their cultures. Long before the Europeans arrived in the Americas, the Indians associated smoking with their adversaries as symbolic of an intention to make peace. Somewhere in the mid-18th century, the peace pipe was ironically combined with the one weapon that remained quintessentially Indian—the tomahawk. We will never know if the ideological duality of the pipe tomahawk was intentional or an afterthought, but they became very popular as trade items and the finest examples served as diplomatic gifts presented to Indian chiefs by those seeking to curry their favor and open the doors for negotiation. Among the Indian chiefs, fine pipe tomahawks

like the CLA auction piece were prized possessions and badges of their accomplishments as leaders of their people. They carried them proudly for all to see. When Mohawk Chief Joseph Brant had his portrait painted in 1776, he was holding his pipe tomahawk.

While the cheap trade tomahawks were often foreign imports, it appears the fine presentation pieces were locally made by gunsmiths. The gunsmith had all the skills needed for the job: blacksmithing skill to forge the head, whitesmithing skill to grind and file it smooth, decorative skill to do the inlay on the metal and handle and to engrave the metal, deep hole drills for the pipe channel, and access to beautifully figured maple woods for the handles. Maple was not typically used for the handles of striking tools, but it was a premier stock wood for high-end American gunmakers. Tomahawk handles could easily be the scraps from rifle stock blanks. Many surviving vintage pipe tomahawks show evidence of rifling in the bowls and haft eyes, proving that they were fashioned from sections of salvaged gun barrels. It's probably no coincidence that the rise in domestic presentation pipe tomahawk production coincided with the movement of gunsmiths to the edge of the new western frontier established by the Proclamation Line of 1763 at the end of the French and Indian War.





(Above) The touchmarks of the Contemporary Longrifle Association artists who made this magnificent pipe tomahawk. "E" for Simeon England, "M" for Mike Miller, and "ODF" for Kyle Willyard's Old Dominion Forge. (Left) Hand engraving and metal inlays were the normal embellishments for presentation tomahawks.

Behind The Beauty

By treaty, English colonists were forbidden to cross the Proclamation Line and encroach on Indian lands. In fact, they already had, and the treaty did little to stop the colonist settlers, hunters or explorers from going into the wilderness in ever increasing numbers. Land speculation was rampant, even without legal claims recognized by the colonial and later state governments. Adventurers and wealthy colonists, royal government officials among them, were making deals of their own with the natives. For the most part, the Indian tribes were willing to barter land for trade goods. They were shrewder at business than they are given credit for, driving hard bargains and in some cases trading land they had neither *de jure* or *de facto* title to! Once a deal was cut, the new owners could expect a fight from tribes who also laid claim to the land or disagreed with its sale.

Kentucky-based artist Simeon England conceived the idea of creating a typical, late colonial era presentation-grade tomahawk for the CLA fundraising auction and convinced his CLA artist peers Kyle Willyard and Mike Miller to join the endeavor. In terms of labor, the three collectively put about 80 hours of work into it. Had they made it in 1765, it would have taken no less time. Tomahawks like this were expensive items. About four years prior to the auction project, England began a detailed historic study of tomahawks and specializes in building period-correct pieces beginning with hand forging the iron heads. Like many originals, this pipe tomahawk's head began as a 4-inch long scrap of muzzle-loading rifle barrel. England hand forged it into shape, adding a hard-steel cutting edge. Then he spent as much time again whitesmithing it to a smooth, bright surface finish.

The decorative work was done by Kyle Willyard, a specialist in making edged tools, especially knives and cutlery. He came up with the engraving pattern based on original designs and hand cut every line with a traditional square chisel and hammer. He also designed the metal inlay. The scalping knife inlay on the blade was very common on period examples, second only to the crescent moon. Inlay is meticulously, mechanically applied by cutting a cavity in the metal with a horizontal "V" groove along the edge. The inlay, be it wire or a shape, is attached by tucking the inlay edges into the groove and hammering the groove edges down to anchor the inlay in place.

Mike Miller, who specializes in gunmaking, designed and built the entire handle. He used gunstock curly maple for the haft with brass and silver for the decorative metal inlay, and silver for the mouthpiece and clean-out cap. He also did the engraving on the latter parts. Just like traditional American craftsmen, melted coins were his source for the decorative silver.

Editor's Note: Visit the Contemporary Longrifle Foundation website for auction information and more details on this tomahawk and more than 20 other unique, amazing and authentically created auction lots from firelocks to fishing kits. ★

For More INFORMATION

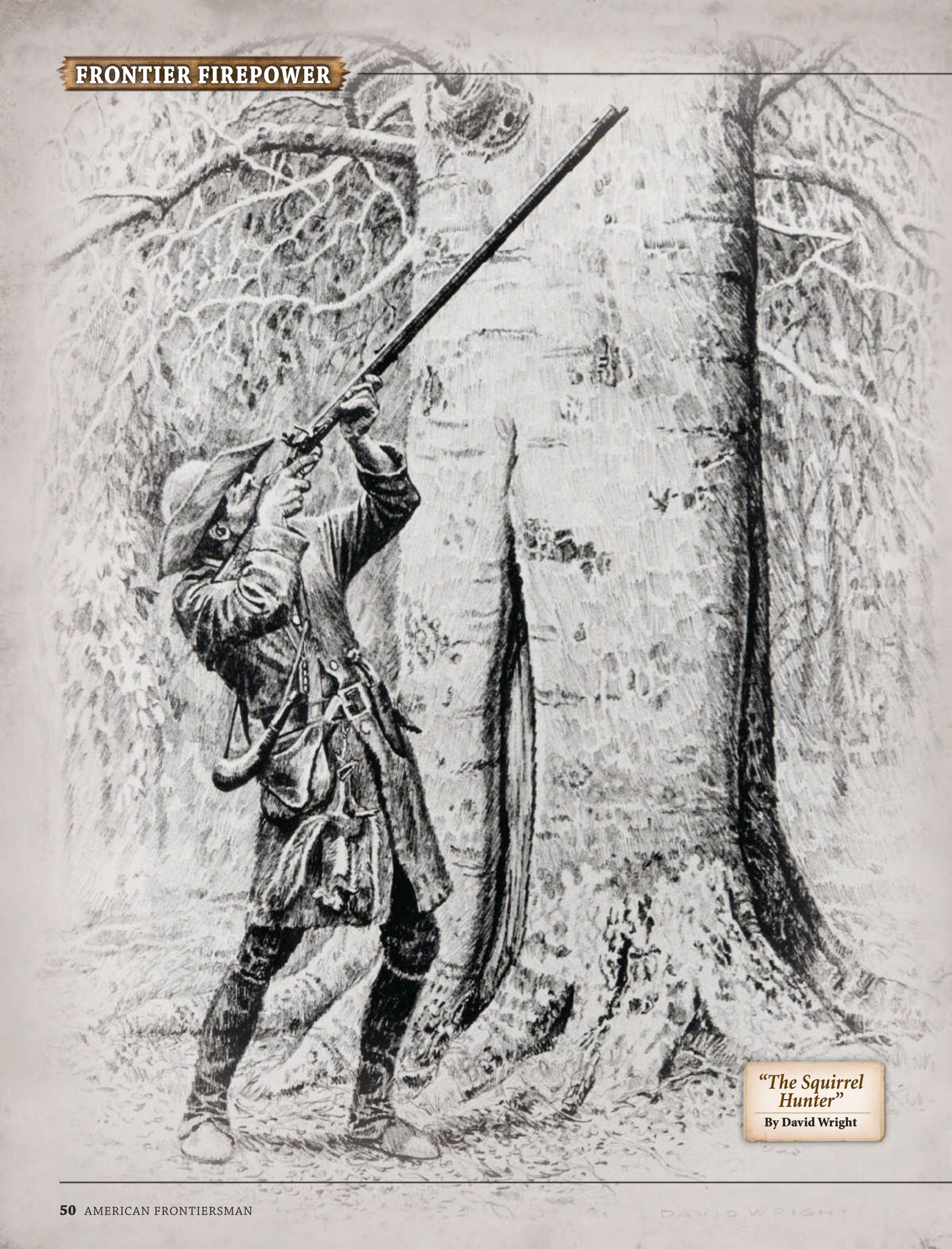
Contemporary Longrifle Foundation
contemporarylongriflefoundation.org

Contemporary Longrifle Association
longrifle.com

Simeon England
instagram@simeonengland

Kyle Willyard
olddominionforge.com

Mike Miller
millerlongrifles.com



"The Squirrel Hunter"

By David Wright

BUSHYTAIL BLASTERS

Squirrel hunting on the frontier was best accomplished with the Kentucky longrifle

BY JOHN E. PHILLIPS



Dressed in caps of coon, coyote, fox or skunk skin and often wearing deerskin britches and shirts, history buffs and antique-gun enthusiasts today look as though they've just emerged from a log cabin for a day of hunting hundreds of years ago. In fact, they're heading out into the autumn woods to enjoy a hunt with their traditional Kentucky squirrel rifles.

Returning To Old Ways

A growing group of Americans prefer hunting and shooting with the guns of yesteryear. Each year, my friend Tim Cosby of Ramer, Alabama, organizes a squirrel hunt for men and boys who enjoy testing their skills the old way. They want to harvest squirrels like the early frontiersmen did and use the same type of hand-built Kentucky squirrel rifles that their forefathers once owned. Cosby takes some of the squirrel dogs he's bred and trained to put bushytails up trees and provide ready targets for both young and old.

For young hunters, there's much more action following along behind a squirrel dog that's treeing bushytails every 10 to 15 minutes than silently sitting and waiting on the tree rats to come out of hiding and dance on the tree limbs. If a youngster learns to hunt and take small game with a Kentucky squirrel rifle, he'll enjoy his hunt, produce meat for the table and reconnect with early American frontiersmen.

During the years 1975 through 1990, gunsmiths probably reproduced more Kentucky longrifles than during the Colonial period. But today, only about 80 people are making premier contemporary muzzle-loading rifles. As in years past, when a custom gunmaker is very good, he can live wherever he wishes, and the business will come to him.

A Kentucky rifle is defined by the period of time that it was built—usually from the early 1700s until about 1850. Although most of these rifles were originally made in Pennsylvania, Virginia, the Carolinas and Georgia, the term "Kentucky rifle" came from the War of 1812's Battle of New Orleans and a popular song then named "Hunters of Kentucky." A phrase in that song read, "[General Andrew] Jackson was not

scar'd at trifles, for well we knew what aim to take with our Kentucky rifles."

The Need For Squirrel Rifles

During the late 1700s and the early 1800s, the demand for buffalo, elk and deer hides grew in Europe, resulting in a practice known as hide hunting in the U.S. Much of the U.S. economy was dependent on hide hunting. However, the daily meat of most frontier families came from squirrels and other small game, including rabbits, raccoons and opossums. So, the need for a very accurate small-bore rifle that required little lead and powder grew.

These rifles were how frontier families taught their children to shoot. They were also the weapon of choice for the young frontier hunters who remained at home and took game while their fathers were farming or hunting big game for their hides. Squirrel hunting with these rifles helped teach young hunters to move in quietly and slowly to get close shots.

Jim Parker of Calvary Longrifles in Warrior, Alabama, has built Kentucky longrifles for 45 years after, as he tells it, "Watching Fess Parker play Davy Crockett and Daniel Boone on TV when I was a kid. Also, I shot a caplock rifle—the later version of the flintlock—that my dad had traded for when I was a boy. I fell in love with that type of rifle.



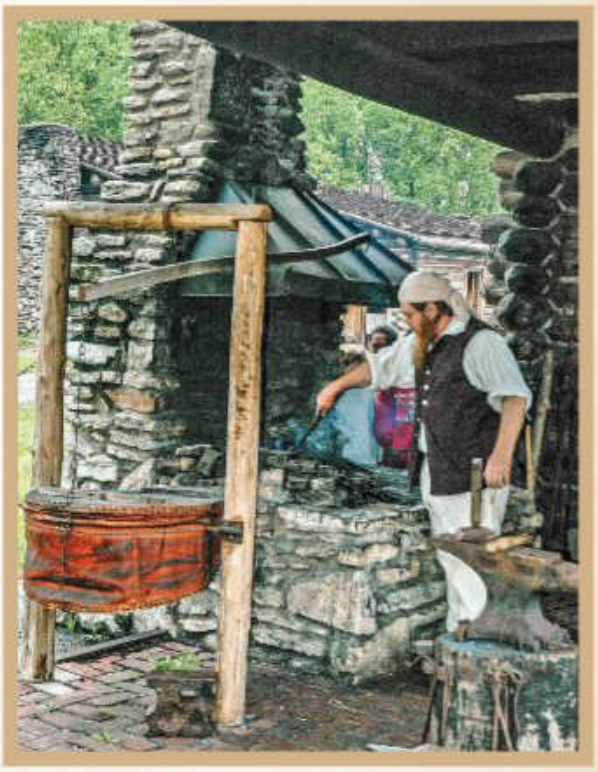
Young boys on the frontier learned to shoot squirrel rifles to take squirrels, raccoons, opossums and even deer for their families when their fathers were gone harvesting big-game hides to sell.

"Actually, most early frontiersmen shot the Pennsylvania rifle, a variation of the German Jaeger short hunting rifle that was .50 caliber or above, with the average being .52 caliber. They used the guns to protect their homes, put food on their tables and take big game for meat and hides. But Southern gunmakers built smaller-caliber rifles known as Appalachian Mountain rifles or Southern Mountain rifles. Many of these guns, known as poor men's guns, were iron mounted, and some included iron and brass. The quality of these guns that still exist is very high. The guns had rifling in their barrels and weren't smoothbore like many of their predecessors."

Historian Jim Randall Pierce of Maryville, Tennessee, reports, "The design of this small-caliber Kentucky rifle has changed very little through the years. The rifles ranged primarily from .32 to .36

HAVE WAGON, WILL TRAVEL

As the American frontier moved westward and southward, **the gunsmiths followed, usually to places with a demand for 12 to 14 new guns every year. Most of the early gunmakers were farmers as well as gunsmiths. These wilderness gunmakers usually made the bulk of their money repairing guns. The early rifles had springs that would break, frizzens that would wear thin and need to be replaced or repaired and stocks that sometimes broke. Historian Jim Randall Pierce mentions that over 100 gunsmiths were listed in each of the years of the censuses of the 1800s from an area of southwestern Virginia to Chattanooga, Tennessee. —*John E. Phillips***



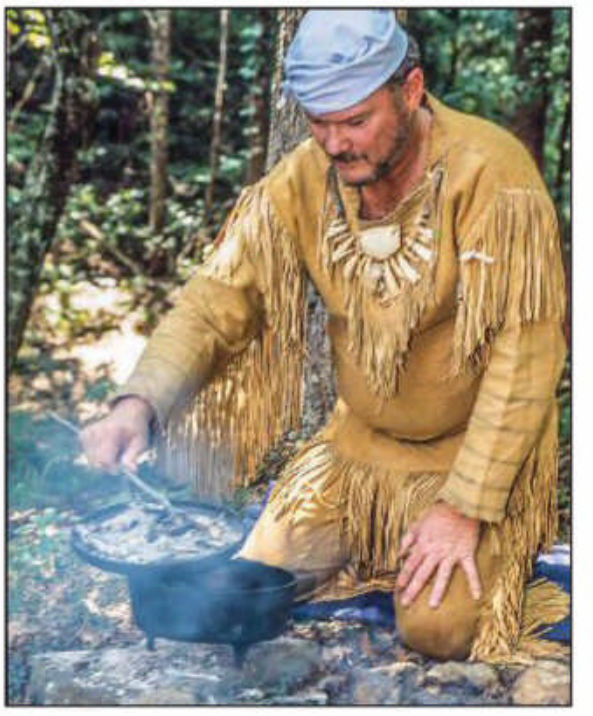
caliber, which was more than adequate to harvest game up to and including deer."

Kentucky Rifle Details

These Kentucky rifles were hand-built with the equipment available to the gunmakers at the time and were very delicate. Duplicating a rifle like these originals is difficult with the modern machinery of today, since the process involved crafting the barrel by forge-welding a flat iron bar, about 0.38 inches thick and 3 inches wide, around a mandrel. Once the octagonal barrel was forge-welded, the gunsmith hand-turned a reamer to smooth out the bore to the desired caliber size. Then, the gunsmith would take an old wooden rifling machine that was set up to determine how many grooves the barrel would have and the rate of twist. Most of these rifles had seven grooves, and the range of the twists were from 1-in-38-inches to 1-in-72-inches.

"Back in those days, the bullets shot in these guns were round balls that were loaded with durable cotton patches," Parker says. "Since the ball was almost the size of the bore, when you sat the soft ball in the bore, the rifling would grab the patch and imprint the rifling on the ball. When the ball was fired, the ball would come out of the barrel spinning, making the bullet much more accurate than a round ball fired from smoothbore rifles would be."

Cosby explains, "Old guns weren't usually listed as a caliber but rather according to the number of balls that could be cast for that gun from a pound of lead. The number of lead balls per pound of lead based on bore size was called the bore. A gun using 12 balls to the pound was called a 12 bore. Small bores were therefore more economical because they used less lead (smaller balls) and less powder. But even in the small calibers, bullet sizes varied, as did the number of balls per pound."





(Above) Historian Jim Randall Pierce of Maryville, Tennessee, is a collector of Kentucky squirrel rifles and other rifles built during that same period. (Left) Although there are some reports of Kentucky squirrel rifles shooting accurately out to 250 to 300 yards, most handheld squirrel rifles were very accurate at ranges of 100 yards or less. (Below) Oftentimes, frontiersmen would be far away from their homes on long hunts in pursuit of buffalo, elk and deer.





Jim Parker is one of the new breed of gunsmiths who has built a reputation for creating quality reproduction longrifles much like the original 1803 rifle he holds here.

"Most of the stocks for these Kentucky squirrel rifles were crafted from maple—sugar maple, a very dense wood with a beautiful grain—and also walnut, ash and cherry woods," Parker reports. "The long barrels allowed the powder in the guns to burn completely, and the longer the sight radius, the more accurately you could aim the gun. The average price of a quality Kentucky squirrel rifle on the frontier was a year's wages, and frontiersmen were glad to pay that for these important and prized tools."

Pierce mentions, "The soft iron that the rifles were constructed of then smoothed out well and made a very good barrel. These early rifle-makers found that the people who owned these rifles had pride in how good their shots were and knew the best load and the best patching combination for the rifles to shoot the most accurately out to longer distances. They were very particular about their sights. In the history books, you may read of 250- to 300-yard shots; however, shooting off-hand, these rifles were extremely accurate out to 100 yards."

Squirrel Rifles Available Today



Many outdoorsmen enjoy preserving their history and buying handmade reproduction Kentucky squirrel rifles to hunt with, and they have fun teaching youngsters how to hunt with them, too.

The KENTUCKY RIFLE ASSOCIATION

The Kentucky Rifle Association is a nonprofit international organization that promotes the pleasure and recreation of people interested in collecting and preserving Kentucky rifles.

"This association wants to bring these old rifles and the newer reproductions out for the public to see," says Jim Parker of Calvary Longrifles. "We don't want them to be collecting dust in someone's basement. We want to let people know how important these rifles have been to the development of this country.

"Some of the major gunmakers in the South included several generations of the Bean family of Tennessee—Baxter, Charles, Charles Jr., James and Russell—who all crafted quality rifles from 1834 through 1920. The Grosses—Henry, Charles B. and Samuel—also produced quality guns. Some of these rifles still exist but have perhaps never been displayed. The Bean family guns sell for $10,000 to $25,000 each, while the Gross family guns sell for $10,000 to $15,000 each. Early guns were generally signed or marked by the gunmaker on the barrel. The signed guns are much more valuable than those not signed."



Other well-known Kentucky squirrel rifle-makers were Elijah and Elisha Bull and Stephen, William and Wiley Gibson. —*John E. Phillips*

"To build a Kentucky squirrel rifle today by hand would require about three months, and it wouldn't have the same look as a handmade Colonial-period rifle would, since most gunsmiths today don't build the parts by hand," Parker emphasizes. "But some custom gunsmiths now do build Kentucky squirrel rifles with all hand-forged furniture (buttplate, triggerguard, thimbles and sights) that cost between $3,800 and $10,000.

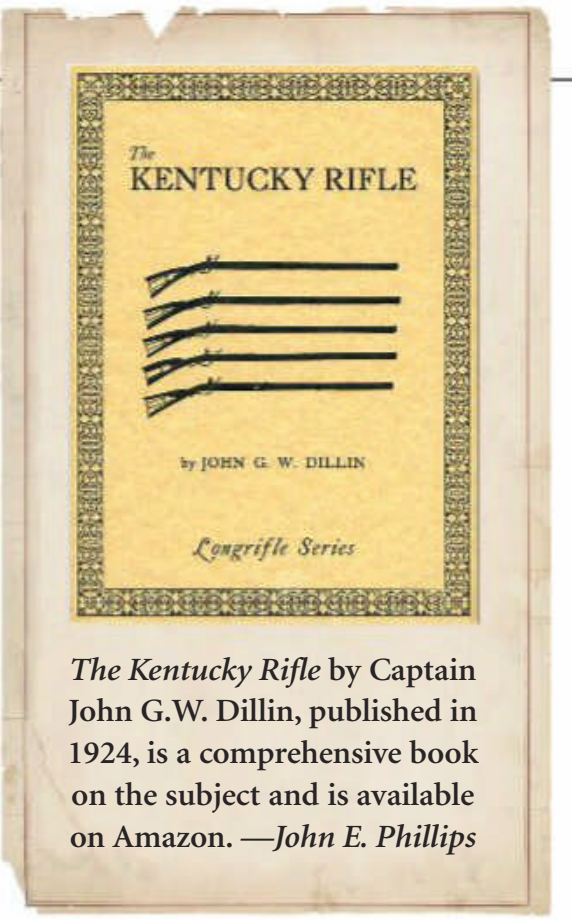
"Some people like antique cars and antique embroidery and lace as well as antique guns. I believe more gun-builders today are building Kentucky squirrel rifles and other longrifles than there were during the Colonial period. People who are history buffs love shooting these longrifles that have made America great."

These extremely high-quality Kentucky squirrel rifles built today by master craftsmen may sell for more than $100,000 if they're ornate. Although a Kentucky squirrel rifle can be plain, it may feature gold inlays, high-quality relief engraving and even embedded jewels.

Pierce says, "Many collectors will tell you there's something elegant about this style of mountain rifle. Most of these iron-mounted rifles don't contain any fancy artwork, but they are very accurate. I know of some original Southern longrifles that have sold for $35,000 to $45,000, and some that will sell for as little as $300. The prices are determined by how well the gun is made, who the gunmaker was, if he was known, and when the gun was made."

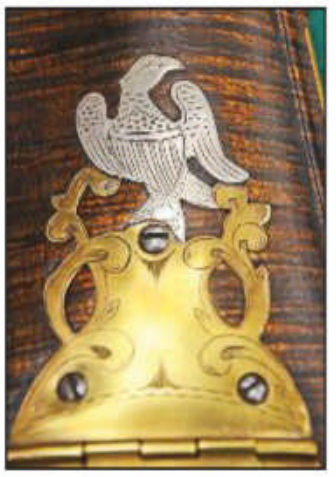
As Parker says, "When you purchase a handmade Kentucky longrifle, it's a piece of art handmade to your specifications and a one-of-a-kind functional firearm. Since I'm a target shooter, I'm very particular about my triggers, my locks and the way the gun operates and shoots. Nothing goes out of my shop that doesn't meet my high standards of accuracy. Currently, I'm building a gun with Keith Casteel of West Virginia, who has been commissioned to build guns for U.S. presidents as well as for the NRA. Keith's very ornate guns sell for more than $100,000."

Although most modern-day outdoorsmen might believe that the traditional Kentucky squirrel rifle has vanished from hunting, a huge revival has occurred in collecting both old and new Kentucky squirrel rifles, resulting in a rising demand from individuals who want to hunt the old way. ★



The Kentucky Rifle **by Captain John G.W. Dillin, published in 1924, is a comprehensive book on the subject and is available on Amazon. —*John E. Phillips***







(Left) Pictured here is a prime example of one of the early squirrel rifles built in 1817 in Tennessee. Notice the tag on the rifle says, "Signature unreadable." A readable signature of the gunsmith who built this rifle could increase the value of the firearm dramatically. (Below left) Today, as in yesteryear, the reputation of the gunsmith and the quality of the guns he produces determine the prices of the rifles he builds. Notice the detailed engraving on this semiquincentenary longrifle. (Below) Longtime collector of original Kentucky squirrel rifles Wayne Elliott of Blue Ridge, Georgia, displays some of his original rifles.

DIY PROJECT

CRAFT A CANE POLE

Whittle away your time to make your own po boy fishing tackle

BY WAYNE WILLIAMS

Once, while fishing from my old aluminum canoe, my partner in the bow hooked a keeper bass. When he worked it close to the boat, however, his reel jammed. He looked at me with an expression of hopeless resignation, as if all were lost. I reached over the side, grabbed his line and pulled the 2-pound largemouth in hand-over-hand. A rod is not always required to catch a fish, but there is nothing like the thrill of a bent rod and the thrum of a tight line as a fish is landed. A fishing rod transforms an otherwise simple set of steps into a thrilling battle in which an angler is connected to a wild opponent.

Early fishing rods were made from ash, hickory, maple or willow. By the 19th century, three-piece rods consisting of a maple handle, an ironwood midsection for strength and a bamboo tip for flexibility were in use. In a pinch, any strong and flexible wood could be used. Horace Kephart gave an account of impromptu rod building in his 1906 classic, *Camping and Woodcraft*. While camping in the Great Smoky Mountains, Kephart's companion had line and some flies but lacked a rod, so he cut a small box elder. "He trimmed it, removed the bark, and spent an hour roasting it over the campfire, drawing it back and forth in his hands, so as not to overheat and crack it, and to temper the heat just right, according to the thickness of the point treated." He hung it to dry overnight, and the next day "caught all (the trout) we could eat."



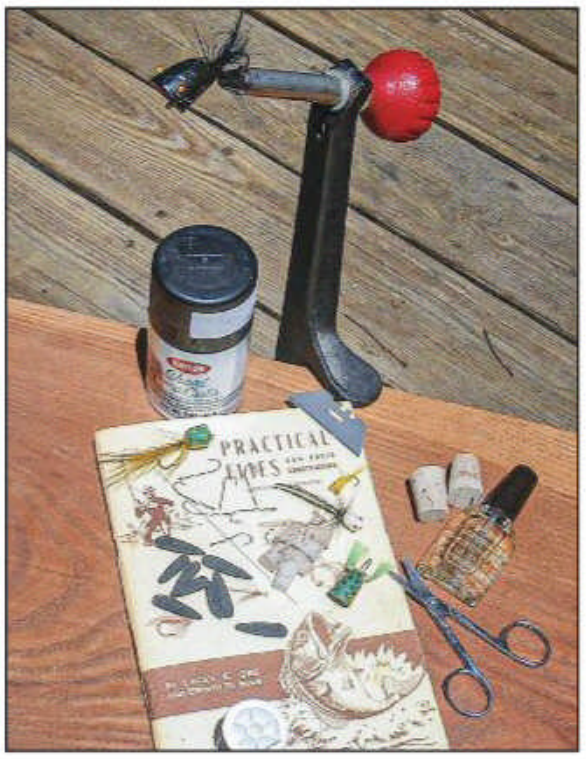
The Rod

At a do-it-yourself fishing rod workshop taught by the late Steve Watts at the Schiele Museum of Natural History in Gastonia, North Carolina, I learned the basics of making a very serviceable rod from materials at hand. This was one of many fascinating workshops conducted by Steve during his career with the Schiele, and the original rod design was his. He had collected southeastern rivercane as the blanks for our fishing rod projects, with pieces of willow to be used for handles. I had been seasoning some limbs pruned from a pear tree, and I brought a suitable piece to the workshop for the handle on my rod.

The great French naturalist, explorer, and spy for the French, Andre Michaux, placed the only species of bamboo native to North America in the genus he named *Arundinaria* in 1803. "Southeastern rivercane," its common name, is found across the south-central and southeastern United States and to medium elevations in the Appalachian Mountains. It tends to grow straight and tall, as high as 25 feet, and has smooth joints, or nodes, unlike the knobby joints of most Asian species that have been introduced for landscaping. Canebrakes were habitat

(Far left) Big bluegills, nice smallmouth bass and other sunfish species are easy to catch on homemade tackle. **(Main image)** The weight of the dense pear-wood handle balances the weight of the much longer cane rod. Note the holder for line, which helps keep things organized when you're out catching a nice mess of sunfish to make a delicious fish dinner.









(Left) The materials needed to create pan-fishing lures include kink-shank hooks, cork and open-cell foam for bodies, a tying vise, glue, rubber spider legs, paint and a how-to book. (Center) A rubber spider body threaded through a hook, and with rubber bands sewn through it for legs. (Right) The cork bug with the finishing touch of hackle feathers to simulate legs.

for passenger pigeons and the Carolina parakeet, and removal of canebrakes by frontier farmers might have contributed to their extinction. Native Americans used this versatile cane to make arrows and atlatl darts, to weave mats and for many other purposes. If you harvest river cane, cut brown, dead stalks to avoid damaging the patch.

I selected a piece of cane from Steve's bundle and started by removing the branches. Next, I shortened the piece of cane to about a 7-foot length, being careful to leave the node on the small end to preserve strength. Where necessary, the nodes were smoothed with a fine wood rasp or coarse sandpaper. A curve in the cane was worked out by carefully warming it over a fire, then bending it straight. After whittling the bark from my 1-foot long by 1-inch diameter piece of pear branch, I was ready to assemble a rod. I clamped the handle upright in a vise and drilled a 3-inch deep hole into the front of the handle to fit the diameter of the base of the cane. I then coated the end of the cane with wood glue and seated it in the handle. The density of the pear-wood handle made it heavy enough to balance the weight of the much longer rivercane.

For finishing touches, Steve showed us how to make guides by straightening a paper clip, then coiling it around the shaft of a Phillips screwdriver leaving a short, straight length on each end. I made a guide for the center of my rod and one for the end. The guides were attached with a bit of epoxy and wrapped with yarn. A horseshoe-shaped piece of thin wire was driven into the front of the handle to serve as a hook keeper. Two 0.25-inch thick by 3-inch long pieces of locust were whittled, then inserted at angles into holes drilled into the handle to make a holder for fishing line. Since this project was the creation of a 19th-century-style homemade rod, we used linen line that would have been available in that period. With the line tied to the locust holder with excess wrapped around the two pieces, then run through the guides, all that was needed was a thinner piece of leader on the end. Unwinding a piece of linen line produced three thinner strands that were still strong enough to handle a fish. With about 5 feet of improvised leader knotted to the end of the line, the rod was functional. Several coats of linseed oil were rubbed into the handle for a water-resistant finish.

The Lures

With rod in hand, I needed some appropriate lures. In his 1653 treatise on fishing, *The Compleat Angler*, Izaak Walton wrote, "You are to know, that there are so many sorts of flies as there be of fruits." I intended to use my rod to catch panfish, so I narrowed my choice of lures to one that would float and one that would sink slowly. A cork-bodied popping bug and an open-cell foam spider would meet my needs. For directions, I pulled the 64-page *Practical Flies and Their Construction (revised edition)* by Gee and Sias, copyrighted in 1966, from my bookshelf. It is one of the clearest introductory books on fly tying and can be found online for about $4.

Plastic foam bodies for lure making are available, but I wanted to make a classic, so I started with a half-inch long cork. Corks, easy to shape and buoyant, can be purchased in a variety pack online from Jann's Netcraft. Using a single-edged razor blade, I carefully made a lengthwise slot in the underside of the cork to hold a kink-shank hook. With one end of a toothpick in the cork and the other end in a piece of cardboard to hold it up, I spray painted the cork black, then brushed red paint on the face. A dab of glue was then spread along the hook shank before it was inserted into the slot in the cork with the hook point down. The kink in the hook shank prevents the hook from rolling sideways in the cork from the pressure of a hooked fish. I added hackle feathers behind the cork for legs.

I prefer open-cell foam for spiders because the finished spider absorbs water when squeezed while submerged, causing it to sink slowly like an injured insect. To make the spider, a hook matching the size of the rubber spider is run through its length. The lure is then placed in a fly-

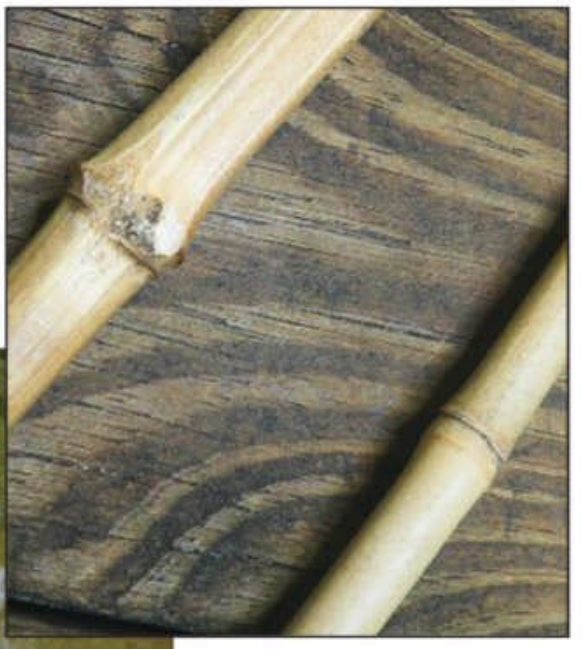
tying vise, and a large needle threaded with a rubber band is sewed back and forth through the body for legs. Snipping the resulting loops finishes the rubber spider.

Tenkara

I think of my rivercane rod as something that Huckleberry Finn might have made had he been a historical character. In fact, the rods we built in Steve's workshop have much in common with classic tenkara rods from Japan, although tenkara rods are over 10 feet long. Tenkara, or "fishing from the skies," originated in Japan over 200 years ago as a simple means of fishing small streams. The idea is to place a fly close to fish from above by using the action of the long rod. A current advertisement on the internet for tenkara rods describes the sport as "intuitive and fun." It is a stripped down, simplified version of fly fishing akin to fishing with a cane pole that I recommend as a means of introducing beginners to fly fishing. In tenkara the line is tied directly to the end of the rod. My homemade rod has additional line wrapped around the posts on the handle, so more line can be loosened through the guides to make longer casts in the classic 10-2 casting arc or to play a bigger fish.

Time To Fish

In much of the South and Midwest, the target of this type of fishing is panfish, members of the largest family of freshwater game fish in North America, the *Centrarchidae*. Bluegills, shellcrackers, warmouth, green sunfish or goggle eye, pumpkin seeds and red eye share the same basic body shape and tasty flavor when fried, and all put up a good fight on light tackle. Old timers will talk of catching "bream," but technically that is a European fish in the family *Cyprinidae*, whose name was misapplied to native species in the United States by early settlers. In a similar way, many southern fishermen still refer to any small fish as a "perch," which is not a member of the *Centrarchidae* family, but a relative of walleye and sauger in the *Percidae* family, which requires cooler water and is normally found farther north. The fishing techniques described in this article work just as well on perch.





(Above) Unlike Asian bamboo, rivercane has smooth joints, or nodes, giving it a much smoother action as a fishing rod. (Left) The rod is fairly stiff but can still be used to cast a lure quite effectively.



Panfish tactics with homemade tackle can produce stringers of fish like this big red eye from mountain streams.

Members of the family *Centrarchidae* can be caught in farm ponds, lakes, rivers and mountain streams. All are nesting fishes that can be caught in large numbers when on their beds. Like their larger cousins, largemouth bass and smallmouth bass, they readily respond to a surface or slowly sinking lure in warmer months. With a little practice, a lure can be accurately sent a workable distance with the cane rod. The best presentation of a cork-body popping bug or a sponge-rubber spider is to cast it over a spawning bed or near cover and let it sit. When wet, the spider will slowly sink, attracting fish. Fish will sometimes strike immediately, but other times it takes patience. After a moment, the slightest twitch can produce results.

Into The Pan

I tested the combination of homemade rod and lures, and quickly caught a mixed stringer of red eye, green sunfish, bluegills and a keeper smallmouth bass from a friend's pond. I prefer to fillet panfish, but they can also be gutted and scaled. To fry them, start by crushing Saltine crackers with a rolling pin to make a fine breading. Beat a couple of eggs and dip the fillets in them before coating them with the breading. Fry them at medium-high heat in your choice of cooking oil, drain the cooked fillets on a paper towel and enjoy the best fish dinner you've ever tasted. ★

Yonder They Are!

When the scent is caught and the adrenaline kicks in, what more is there to say?

BY LAMAR UNDERWOOD

There are words that strike a quail hunter's ears like claps of thunder, promising the end of a parching drought.

"Duke's acting birdy… Lots of scent… They've been here… Careful now." The heartbeat leaps, pulling nerve ends taunt. Legs that were feeling tired become sprightly with new bursts of energy. The hands on the double gun caress the familiar shapes of walnut and steel with anticipation.

Then comes the cry: "Point!"

When that single word rings out in bobwhite quail country, in pinelands or tawny sedge patches or brush-tangled field edges, the stage is set for the bird hunter's ultimate reward. The pointer or setter is locked in a trance-like staunch pose. As he steps ahead of the dog, the



Remington Art Museum

“While there is something undeniably exciting about the vision of a pointer or setter slamming into a wall of scent at full gallop, such events are often a speck on the horizon.”

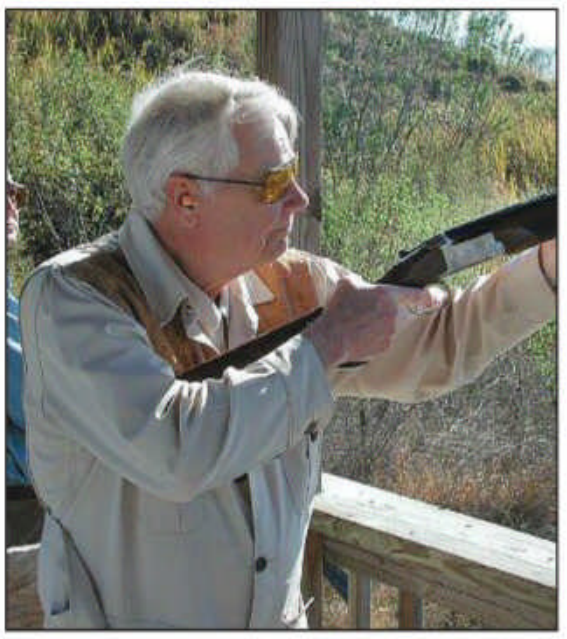


hunter walks like he’s afraid he’s about to step on a land mine. He trembles when one boot snags on a briar, then breaks free. The other boot crunches on dry weeds, a sound too loud. His grip on the gun tightens. There’s a wobbly feeling in his knees.

This is it! This is the reason why he owns a bird dog, or why he dreamed of this hunt over countless hours of planning and research and bleary-eyed surfing on the internet, or even why he bought an airline ticket.

“‘Live in the moment.’ Where did I first hear that?” he wonders as he creeps ahead. Anyway, it was true, and the moment is now!

The explosion that follows is a feathery eruption of brownish hurtling bodies, startling fast as they vault toward the stubby black-jack oaks at the edge of the field. As the gun comes to his shoulder, the hunter sees the birds are already among the oaks, twisting into narrow corridors. He pokes the barrel toward one image. No time to aim. swing the gun. Just stab at it. *Wham!* He sees bark and twigs scatter. The oaks are swallowing the birds. There’s a final fleeting image. Another stab. *Wham!* Suddenly the oaks are empty, the double gun is empty and the dog is scouring the grass for dead birds in vain.



Like many other quail addicts, the author regularly tunes up his shooting skills on the sporting clays range.

➤ To Point Or Not To Point

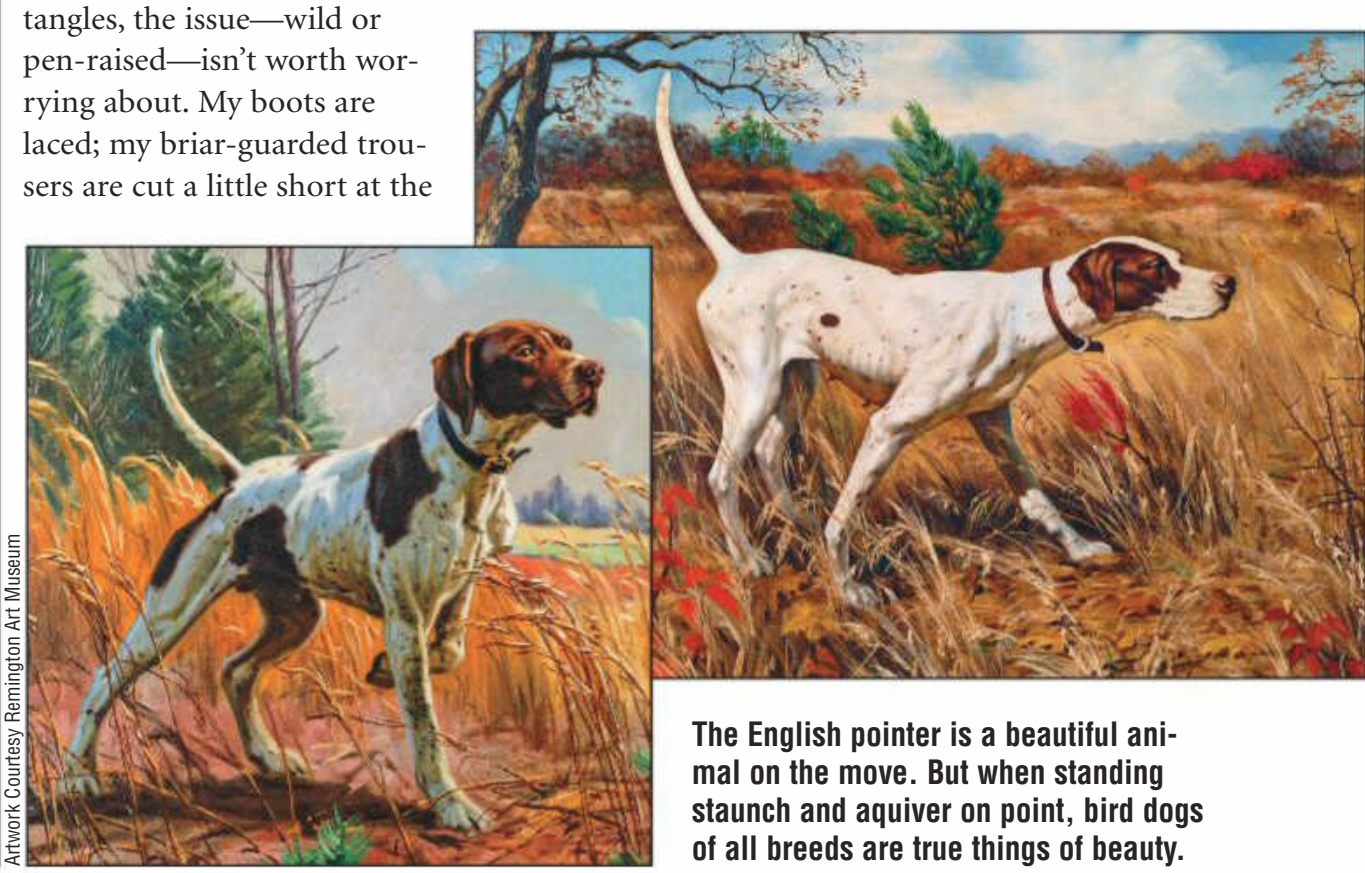
Not every scenario that begins with the shout “Point!” turns out as described here. For openers, the birds might run ahead of the dog’s initial point. That’s exactly the reason a savvy hunter doesn’t disengage his safety until birds are in the air: He might trip or stumble as he moves ahead of the dog for running birds. The “Point!” may not be for a covey at all, but a single bird, hunted after a covey has been scattered. The covey rise itself may vary in intensity depending on the size of the covey and whether they’re wild birds or pen-raised for preserve hunting. Once you’ve put up a covey of wild birds, you’ll never again wonder if there’s a difference between wild and pen-raised.

For this aging tramper of stubble and tangles, the issue—wild or pen-raised—isn’t worth worrying about. My boots are laced; my briar-guarded trousers are cut a little short at the ankles to clear the weeds. My 20-guage side-by-side is an old friend, and the game pocket of my shooting vest still has feathers from the day of my last hunt. I’m going quail hunting. I’ll hunt where I can when I can, with the vision of staunch and gallant dogs and whirring wings leading me on like a kid at Christmas. The boy who first hunted bobwhite quail in Georgia pinelands in the late 1940s is still very much alive inside me, calling for me to find another covey, to experience yet again the classic upland scene that is bobwhite quail hunting.

I use the word “Point!” with a touch of hesitation. For while “Point!” resounded from the magazine and book pages of my youth—and still does today—the elders who took this lad quail hunting used a simpler and more colorful expression to announce that Mack or Lily or Queen had locked up on birds.

The exalted cry that rang through the crisp air was, “Yonder they are!”

For me, there is pure magic in that



Artwork Courtesy Remington Art Museum

The English pointer is a beautiful animal on the move. But when standing staunch and aquiver on point, bird dogs of all breeds are true things of beauty.

phrase, so much so that I still use it today. Even though the years have carried me far from my Southern accent, the heritage is still there. And when we're in the field together, on a preserve or on one of those elusive and almost-rare wild-bird hunts, you'll be happier than a pig in slop when you hear my voice call, "Yonder they are!"

➤ The Covey Question

If our dog can remain a statue, as expected and trained, and if the birds hold tight as quail-hunting literature and legend suggest, our "Yonder" is about to turn into a rush of excitement that few bird-hunting episodes can equal. The good covey rise is indeed quail hunting's moment of truth, an event conjured in dreams, relived in the paintings of talented artists and sought by folks like us who appreciate dog work and a game bird with the qualities of bobwhite quail. When things are right, they come in coveys; they offer single-bird shots that are like flushing small ruffed grouse in tight cover; and they're so good on the table that they inspire culinary artistry in enough ways to fill a cookbook.





Covey rises in cover offer no chance for a double. Focus on one bird or all you'll knock down are leaves and tree branches.

The two equally challenging acts of traditional bobwhite hunting—covey rises and prying loose single birds—have lost some of their distinct differences in today's released-bird shooting. In preserve opportunities at their lovingly managed best, covey rises come in spurts of six or eight birds at best. Of course, there are exceptions. In a superb moment, you might see a dozen birds bouncing from the sedge grass.

The sudden vision of multiple targets over your gun barrels is so unusual that it's startling. The confidence and cool reflexes of a crack shot are lost in a heartbeat. *Pick a bird! Stay with it!* The commands whip through your thoughts, but the sight of so many birds in the air at once is overwhelming—your dream come alive. Breaking that vision down to one bird and staying with it is hard to do. You don't even realize it, but your head is lifting slightly as you peer down the gun barrel in elation. Your timing is shattered. Your gun is slow—glacier-slow it seems—obeying the commands your reflexes dictate.

Three seconds! That's all you have. "Mississippi one…Mississippi two." By "Mississippi three," your smooth swing has degenerated into a panicked throw shot—a stab, a poke, a desperate jab at a disappearing brownish blur.

For sure, covey rises take some getting used to. For openers, take the fact that most of the great quail paintings you've admired over the years show the covey leaping from almost right under the dogs' noses. Sometimes they do. But often they can be 15 or even 20 yards in front of the point—wild birds particularly. You're behind from the get-go with the need for speed.

Perhaps the "covey" you're expecting turns out to be four or five birds. A paltry bunch if you were expecting an honest-to-God covey. Good dog work and shooting action, yes, but not the covey rise of 12 or 15 birds of quail hunting's halcyon days. Back then, coveys of five or six birds were left for seed; the singles were not pursued. Now the average shooting preserve party tries to hunt down every escaping single like they're dollar bills getting away. Which, of course, they are.

➤ Waxing Nostalgic

Thinking about what used to be isn't good for the quail hunter's morale. Better instead to loosen up and do yourself the favor of enjoying whatever turns you on in the great outdoors. If the fish aren't hitting topwater—a passion for all anglers—you'll go deep. You'll use lures, baits, rigs—whatever the hell will make fish strike. If a K-Mart is standing where your granddad once kept his hunting coat puffy with Bobs, you'll press on to find new grounds to rekindle the flame.

Of course, quail hunting was better when Nash Buckingham was tramping

“Birds, like gold, are where you find them. They can be a lot of other places, too.”



behind his setters and pointers. Truth is, not many people who lived back then were able to get in on the fun. Except for a few lucky farmers tending the fields, quail hunting has never come easy. The inspirations that drive us to the sport—the dog work, the game bird itself, the pastoral surroundings where quail are found—these visions must be nourished with effort and money. What we seek is irresistible. It can’t be replaced by golf or football games or even fishing. We can enjoy those things if we like them, but the love of following pointing dogs in treks toward whirring wings is a force like no other.

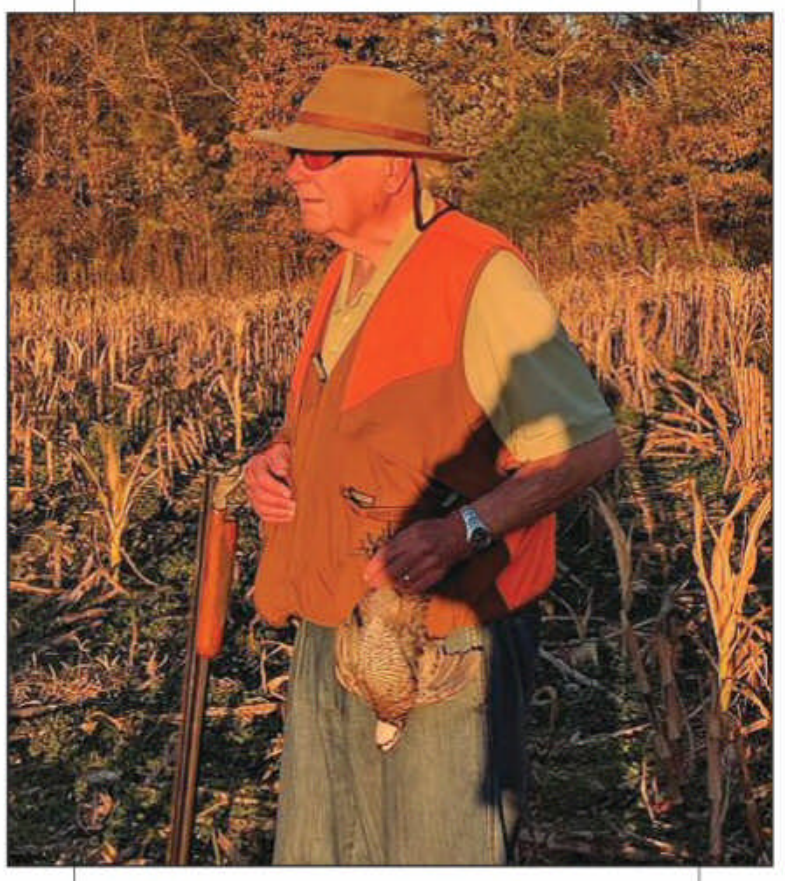
We yield, we respond, doing whatever it takes to keep alive a certain part of our guarded world of dreams and memories we refuse to allow to wither away. If you’re a bird hunter to the core, no matter what you have loved and lost over the years, that part of you never dies.

➤ Let The Dogs Out

So, we’re out there, tramping again. As noted bobwhite storyteller Havilah Babcock so wisely wrote, “Birds, like gold, are where you find them. They can be a lot of other places, too.”

Sometimes those other places seem beyond the radar noses of our canine companions. Whether working in “hunt close” sweeps or bending out to promising horizons, they simply can’t find the birds. Indeed, boots are made for walking, and ours get in some overtime while doubt creeps into our minds about the ground we’re hunting, the vagaries of scenting conditions and the mysterious movements of bobwhite coveys. At such times, it pays to be persistent but also patient.

Out in the uplands (is there anywhere else you’d rather be?), enjoying the good dog work, no matter how fruitless, we become part of a setting where things might happen that we will remember for the rest of our lives. The air has the tawny sharpness we missed all summer, the sun is warm on our bird vests, winter visitors like mallards flash past, and we hear the jabbering of familiar crows. Sometimes we look over the treetops ahead and see a hawk floating in circles, a sight that immediately triggers the frightening notion that the winged hunter has found and spooked our birds.



The author holds a late-afternoon cockbird like he intends to have it mounted. To many, there are few game animals more tasty.

Finding the mother lodes of birds on huntable land rests on a game plan with two critical elements: the choke-bore noses of pointing dogs and our tactics in using them.

Not all bird dogs are created equal. Some seem to have an uncanny ability—their noses are radar-sharp. They work the terrain with careful, methodical sweeps, bending back or off to the sides to check out birdy-looking copses. They do not plunge into tangles of briars and field-edge bushes, nor do they ignore them. They circle such thick spots, probing all sides for precious scent.

On my hunts, it’s more likely that such a dog was trained—”broke” to use that terrible word—on a farm or in a suburban backyard where a copy of the late Dick Wolters’ mellow *Gun Dog* book was on hand than on the prairies of Saskatchewan or Alberta frequented by professional trainers. Big-going field-trial dogs, trained by pros and destined to hunt leased land and plantations, get in many weeks of work with sharp-tail grouse long before open quail season dawns in places like Texas and Georgia.

While there is something undeniably exciting about the vision of a pointer or setter slamming into a wall of scent at full gallop, such events are often a speck on the horizon, a Jeep or horseback ride away. Our *Gun Dog* pointer or setter, plodding along, will be working where our legs can take us, within sensible range. We won’t be walking past many coveys without contacting them. We hope.

➤ Worth The Challenge

Sometimes, even with the best dogs money can buy or we can train, we bobwhite hunters are up against a stacked deck. Take a morning when you open the dog box over iron-hard ground with a stinging wind out of the northeast. Scenting conditions will be somewhere between nil and none. Rain is another deal breaker. Although a little moisture is good for scent, days when the world around you is like one vast, soaked sponge won’t be fun. Preserve shooting can be ridiculous in the rain, with the birds mobbing up in briar-choked nooks the dogs can’t reach. When you do get these soaked fugitives up, their flight may be nothing more than a short hop, dangerously close to the dogs’ noses. I’ll take a pass on preserve birds in the rain, unless I’m gunning where the operator’s birds are proven fliers in all weathers.



Successful quail hunters have a mental map marking the home ranges of every covey. My own "Treasure Island" sketches of bobwhite heaven focus on the bob's predictable schedule: feeding somewhere in the morning; loafing, dusting, catching insects in some secluded spot midday; feeding in the late afternoon; then roosting in some weedy field with no trees overhead.

Gleaners from the moment they're born, bobwhites possess tough gizzards and ample crops to enable them to snatch whatever tidbits they can from the ground under their feet. Special treats like golden corn kernels, soybean and wheat seeds are backed up by a multitude of seed-bearing wild plants. Acorns are shattered and consumed eagerly. Bugs that fail to scamper from the bob's path are quickly pecked. The food chain in all seasons stretches thorough a landscape of brushy edges alongside crop fields, pinelands with broom sedge and gallberry patches, and meadows and old fields lush with weeds. Swampy wall-like tangles where enemy predators thrive may be nearby, but where they choke out the open country, they doom the bob's chances.





Some hunting preserves and many plantations feature mule-drawn wagons for transportation during the hunt. ATVs can also be a big help on long days when the legs are ready to stop early.

Over most of the bird's natural range, wild bobwhite populations are devastated by crop fields cut clean as billiard tables and bordered by dense walls of brush and briars, heaven for predators. So clean do today's combines leave fields like corn and soybeans that "a chicken following behind one would starve to death," as one of my Georgia uncles puts it. Even the most efficient combines spill some grain—particularly where they make sharp turns—and bobs risk a few moments of exposure in the fields for these treats. They fly—not walk, as in bobwhite literature—into the field from nearby cover, feed quickly (the big yellow corn kernels are the favorite), then fly back to safety. Of course, they're spooky as hawks out in the open.

In good quail country, the croplands are bordered by the reaches of open pinelands with broom sedge and old fields of ragweed—cover a dog can hunt through. To make the scene picture perfect, add in patches of sunflowers, millet or lespedeza. These Valhallas are maintained on plantations, shooting preserves and private farms where the owners care about bobwhite coveys.

Perhaps it is in such a place that good luck smiles upon us. Up ahead, pointer Mack's ground-eating strides have broken into a stalking, tip-toeing creep. Then he stops altogether, right at the field's edge, a figure as locked and solid as granite.

My heart surges. Hands tighten on the smoothbore. Then, from the Southern boy that will always live inside me, my call rings out, "Yonder they are!" ★

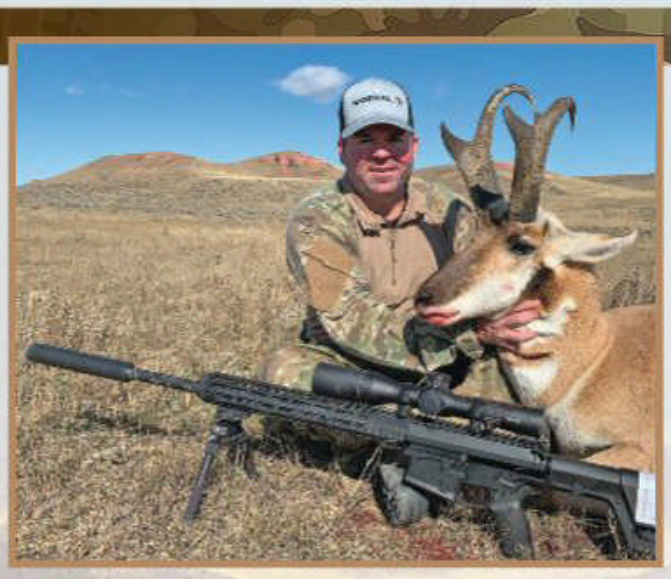
GOATS BY

The American antelope is not actually an antelope; those exist in Africa, Eurasia and private hunting preserves in Texas. But growing up in Kansas, we mistakenly identified the pronghorn as an antelope. Formally *Antilocapra americana* (translation: American goat-antelope), the pronghorn found in the Midwest isn't a member of either the goat or the antelope family; it's a closer relative of the giraffe than anything else. So, you might excuse our childhood confusion.

Anyway, up here in Montana, we call them goats—speed goats, to be exact. Whatever the name, farmers and ranchers all agree: We hate them. Any animal that crawls under a cattle fence and then stands up, stretching and breaking wires or pulling steeples, is evil and should be shot on sight. The fact that they don't taste as good as deer or elk also counts against them. But their wariness and speed make them a challenging adversary to hunt, and this may be their only redeeming quality.

The pronghorn is the fastest land animal in North America, capable of running 55 miles per hour.

AR



Head to Wyoming to take on speed goats with modern guns, glass and gear

BY ROBERT JORDAN



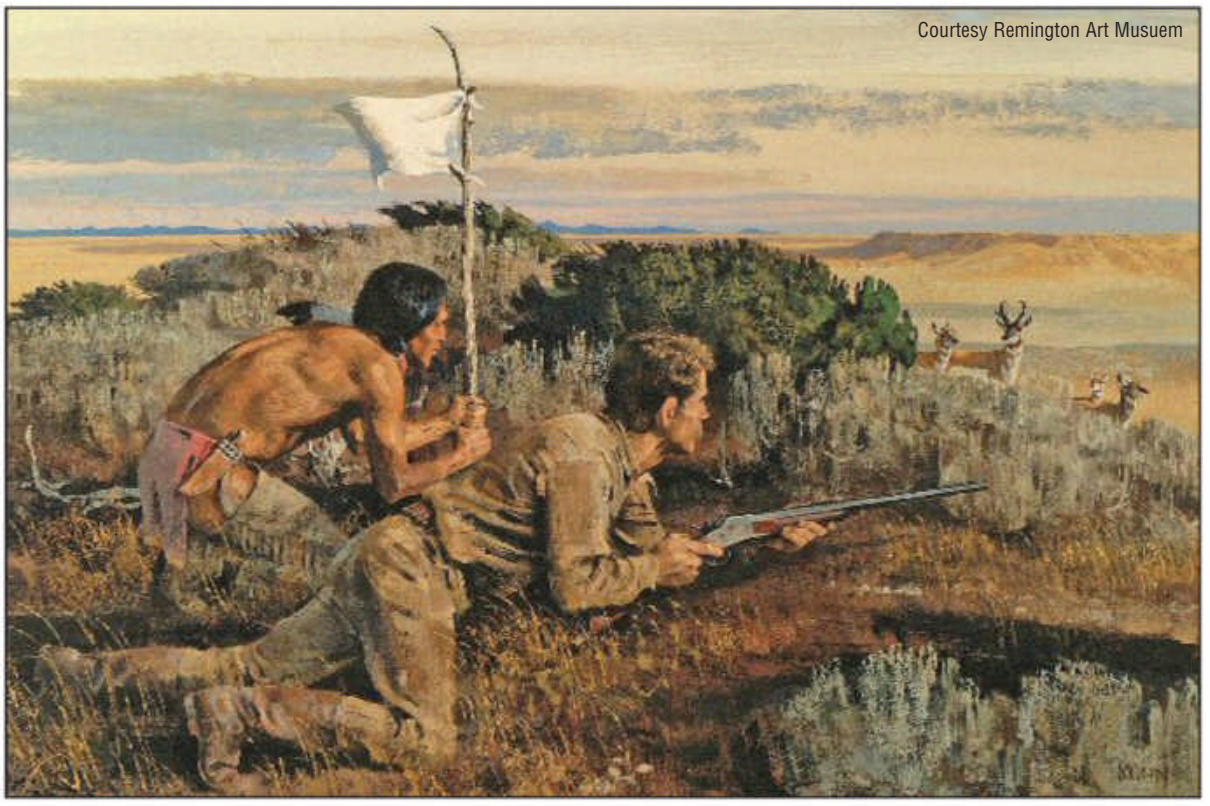
A few thousand years ago, they were outrunning super-fast predators before those became extinct. Lewis and Clark wrote about the pronghorn, and then, for the next 100 years, they were hunted until only about 13,000 remained. Today, their numbers are estimated at half a million, and hunting is encouraged. This leads me to the heart of the story about how I ended up near Gillette, Wyoming, whacking a pretty decent "goat."

The Right Rifle

Earlier this year, Scott Cherek of Athlon Outdoors invited me on a pronghorn hunt. Despite never finding a way to get the gaminess out of those steaks, I readily agreed. Full disclosure: I'm terrible at hunting pronghorn. Up until that time, I'd only shot one in my lifetime despite many hunts as a kid. Scott said that I would have a professional guide, so he must've heard how much I suck at hunting these things.

I needed a good rifle, and I'd recently decided to give up on traditional bolt-action rifles for hunting. I've tried them again and again, but I carried an AR on duty for over 20

Courtesy Remington Art Musuem





The guns and gear have changed substantially through the years, but the tactic of sneaking up on pronghorns over hills and brush remains the same as it was in centuries past.

years. That platform comes second nature to me, and this year, I stopped fighting it. I retired my .300 Win Mag bolt gun and embraced the platform that I love. My AR-10-style rifle started as an Aero Precision 6.5 Creedmoor that I got from Brownells at a smoking deal with no stock and no forend. I called up Proof Research and switched the barrel to a 22-inch carbon-fiber beauty that shaved a lot of weight off the gun. Next, I dropped in a Geissele G2S trigger. A Magpul PRS Gen 3 stock and a Cross Machine Tool free-floating forend rounded out my modifications. Now, I just needed a really good scope.

Leupold Comes Through

Shawn Skipper, senior public relations specialist at Leupold, suggested the Mark 5HD when I explained that I was tired of short-stroking my bolt action or fumbling with the magazine release, and from now on I was going to hunt with an AR. Shawn recommended that I try the new Mark 5HD 3.6-18x44 MOA scope, explaining that the Mark 5HD was made for guys like me who were crossing over from tactical to hunting. First, it's far lighter than most tactical scopes, weighing just 26 ounces. The AR-10 platform is already heavier than most traditional hunting rifles, so the scope's light weight is a plus.

Secondly, the Mark 5HD is a first-focal-plane (FFP) scope, like most tactical scopes that I've used. First focal plane is important when you're using your mil-dots or hash marks to range by judging the height or width of an object. FFP is also important for doing quick changes in holdover or windage without adjusting the turrets; in FFP, the mil-dots, mil-rads or whatever style of hash marks are always the same in relation to your target. So, no matter what magnification you're on, you can use them to make a quick windage or elevation adjustment before sending your round downrange.

Third, it has a tactical-style elevation turret for guys like me who are used to ranging and quickly adjusting the turret for dead-on holds when shooting. It also has a push-button zero lock so that you can turn it back to where it's zeroed, and a little button will snap out to lock it there. This feature later turned out to be vital on my hunt. The elevation turret has large numbers and very tactile clicks for each 0.25 MOA.

Finally, Shawn explained that while the Mark 5HD looked like a shorter hunting scope, it had three full revolutions of travel for a huge amount of come-up when shooting at extreme long distances.

Thorough Preparations

I mounted the scope and carefully followed Proof Research's directions for breaking in the barrel. I told J.J. Reich from Vista Outdoors that I needed an accurate, match-style bullet that was designed for hunting. He recommended the Federal Premium 135-grain Berger Hybrid Hunter rounds and said that this top-of-the-line hunting round would perform well on the long-distance shots I was likely to be taking on a pronghorn. I used my chronograph to average my velocity while I sighted in at 200 yards.

An online ballistics calculator provided



Patience and good glass proved vital for picking out trophy pronghorns at distance.

my dope in 50-yard increments out to 800 yards. I checked kinetic energy and it dropped below 1,000 foot-pounds around 600 yards, so I decided that was probably my max range. However, the Leupold Mark 5HD and the Proof Research barrel were clearly capable of hitting at much greater distances. My law enforcement background gives me very little experience in shooting past 100 yards, but this scope was making it easy.

The Hunt

Just four days after sighting in my new rifle, I packed up my gear and headed down to Gillette, Wyoming, to meet up with my guide, Kory Study of 7-7 Outdoors, to help rid the world of one more of those fence-destroying speedsters. Kory told me that he preferred it if I shot my rifle suppressed, and I don't blame him. So, I screwed on my trusty Thunderbeast 30P-1 and we re-sighted in the gun. I hoped that the 40 to 60 feet per second more velocity that I figured we were gaining with the suppressor wouldn't throw off my range calculations too much.

Kory drove me to Area 23 where I had the tag, and we immediately encountered herds of five to 20 animals. We glassed for a couple hours, and then Kory picked one and said that he thought it looked pretty good, so we began our stalk. The chosen buck was behind a small hill and we ranged where we thought he would pop out, around 450 yards. I checked my dope on the sticker on my stock and dialed my turret 7.2 MOA. Kory ranged a couple of does from the herd as they emerged and told me to dial to 500 yards. As I glanced at my stock to see my come-up, I noticed movement off to our right rounding a steep hill. It was a coyote, and this was sheep country where they're hated far more than pronghorn. "Coyote," I hissed.

Kory saw where I was looking, swung around and immediately ranged it: "165 and closing." I reached up to the ZeroLock turret on my Leupold Mark 5HD and, without looking, twisted it back until it locked at my 200-yard zero. At the same time, I was swinging my barrel around 90 degrees as Kory slid back out of the way. I knew I was still going to be shooting a little high, so I put the crosshairs on the coyote's belly and pressed the trigger. Thwack! He yipped, jumped and convulsed



MORE SCOPE OPTIONS

Leupold's Mark 5HD 3.6-18x44 MOA scope isn't its only offering for shooters who straddle the fence between a tactical and a hunting scope.

Let's face it: Lots of people want to get into precision rifle competition but cannot afford a good tactical scope and a hunting scope.

The VX-5HD was introduced in 2017 and marketed as a dedicated hunting scope due to being lightweight, very robust and providing excellent light transmission for dusk and dawn. The VX-5HD's 3-15x44mm variation will now be available in first focal plane with a mil-dot reticle and milliradian turret. As mil adjustments gain popularity in the civilian market and shooters want to do more with their scopes, Leupold's VX-5HD 3-15x44mm is adapting to the times. MRSP: $1,235. (leupold.com) —*Robert Jordan*

down the hill out of sight. Dead coyote.

The pronghorn herd split up, and the next two hours were spent following the wrong group, then reacquiring the right group. We climbed to an overlooking saddle and eased our way around a sidehill until the buck was in view. My Atlas bipod had one leg fully extended and one leg fully collapsed to compensate for the terrain. "302 yards," said Kory. I dialed to 2.5 MOA, aimed and sent it. The buck dropped and never moved a muscle. The Federal 135-grain Berger Hybrid bullet shattered both shoulders for an amazingly clean kill.



Spotters aren't just for snipers. Teamwork helped everyone participating in the recent Wyoming hunt make their long shots count.

Sweet Success

A few hours later, I met up with Scott Cherek, Shawn Skipper and Kayley King, who was also from Leupold. We spent the next day hunting pronghorn and coyotes. Scott got a Camp Creek hunting knife from TOPS Knives that was designed by their president, Leo Espinoza, for field dressing the animals. Every tag got filled (Shawn and Kayley even bought additional over-the-counter doe tags to keep the hunt going), and the Camp Creek proved itself thin and sharp for easy gutting. I took my pronghorn to Koehler's Wild Game in Gillette, but I hope to borrow the knife from Scott to process the Montana deer and elk I plan to harvest later this season.

My hunt turned out to be pretty epic; a guy who's never had much success hunting pronghorn got a buck that scored over 80 on the Boone and Crockett scale. But let's give credit where it's due: good equipment, a good guide and a little luck. I plan to take that same 6.5 Creedmoor with the same Federal Premium ammo and the same Leupold 5HD scope into the field to fill future big-game tags. A tactical guy is transitioning into a hunter, and it just took the American designers and builders at Leupold to understand me and my background to make it all possible. For more information, visit leupold.com. ★

PRE-HUNT GEAR LIST

After about a 20-year hiatus, I started hunting North American big game again when I moved to Montana. Normally, when I hunt, I take my Eberlestock X1 backpack with a CamelBak water pouch, game bags, a Montana knife, a skinning knife (TOPS' Camp Creek if I can steal it from Scott Cherek) and a ceramic sharpener, bear spray, a headlamp, latex gloves, rope with double pulleys, a gambrel, extra wool socks, game tags, a first-aid kit with Advil for hangovers and tourniquets for gunshot wounds, wet wipes and toilet paper.

In my FHF Gear bino harness, I have Leupold 10x42mm Pro Guide binoculars, Garmin 64s GPS, a Leupold RX-1600i rangefinder, extra batteries for everything and an extra skinning knife. And lastly, I have a MOLLE backpack frame converted into a meat hauler. It turns out that when you hunt pronghorn on the plains, you can drive to the kill site, so all you need is a good set of binos, a rangefinder and a knife. Oh, and most importantly: Bring a flask with a good scotch. How else will you celebrate when you make that awesome shot? —*Robert Jordan*

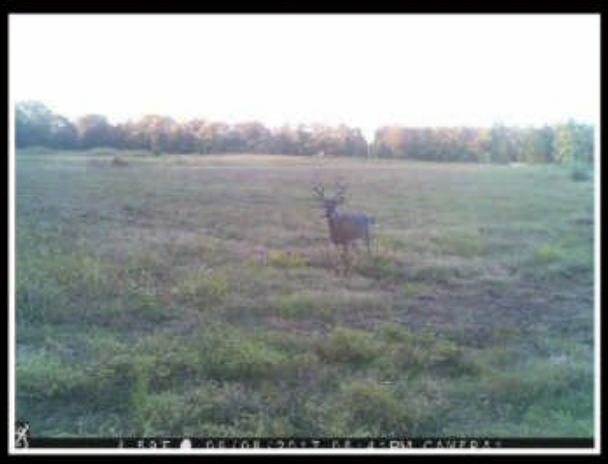














WOODS & FARM RECON

A selection of trail cams that can help you keep tabs on critters 24/7

BY JAY LANGSTON

Life on a farm takes on special meaning when you are fascinated with whitetails. Deer hunting—and the activities that surround it—become a year-round adventure. Game cameras have become integral parts of keeping track of the deer on mine and my neighbors' farms, and allow me to keep up with special bucks as they mature from one year to the next.

But keeping tabs on local deer isn't the only reason I've enlisted the use of game cameras. They're an excellent means of security, too. My Kentucky farm was a 2-hour drive from home, and it was difficult to keep track of things from a distance. I had a problem with some of the local miscreants driving through crop fields and stealing anything that wasn't nailed down. Game cameras became my eyes and helped me catch some of the culprits causing trouble.

Game cameras have come a long way since I first started using them more than 15 years ago. The earliest models were little more than weatherproof boxes with infrared-triggered cameras inside. They used actual film and were expensive to maintain. With the advent of digital photography, things changed in a hurry. The technology improved, with more sensitive cameras, better flashes, better memory storage and better battery life. These days, the technology has improved to the point where images can be sent straight to your computer or phone in real time.

Over the past few seasons, I've been keeping tabs on things around the farm with a pair of simple, inexpensive

Browning trail cameras I picked up at Sportsman's Warehouse. These are very basic cams that were on sale for $60. They're a far cry from the new, sophisticated units available today. Whether you pick a simple, low-cost camera or one of the more expensive wireless units, game cameras provide critical information you would otherwise miss. I've become addicted to running my cameras like a trapline, and there's a good chance you'll enjoy using them, too. Check out some of the following cameras to see if there's one for you.

Browning Strike Force Sub Micro 16 MP

Browning's Strike Force HD Extreme has been around for a couple of years, but it's still the smallest high-performance trail camera in the hunting industry. The HD 850 camera features a 0.4-second



trigger speed and 0.8-second recovery time between pictures. It captures 16MP photos, and its new video processor produces quality 1280x720 HD video clips with sound. This camera also takes night pictures using Browning's "Zero Blur" technology, which eliminates motion blur from game in your pictures at a range of 100 feet at night. Detection range goes out to 80 feet, with the flash range going out to a maximum of 120 feet. Other features include SD card management options and Smart IR video that continues to record video during the day when game is present. The Strike Force HD 850 is also compatible with up to 512GB SDXC memory cards.

Its performance (with fast shutter speeds and refresh times) is comparable to that of more expensive models, and it takes up to 2 minutes of video. On the downside, setup can be more laborious compared to other cameras. The bottom line is that it's packed with features and benefits, and checks all the boxes you'll need in a trail cam. Price is around $200. (browning.com)

Bushnell CORE DS

Bushnell's CORE Trail Camera is built with a host of features inside that reveal more of the tough world outside. Crafted with more speed and range to capture more useful images, and industry-leading battery life, CORE trail cameras give users more options for preset or custom settings to maximize each camera for any situation. All that comes standard with the reliability of Bushnell.

Taking it to the next level, the new CORE DS offers advanced technology for hunters and game managers who want the best image quality in every condition. Most trail cameras use only one image sensor to capture images 24 hours a day. Users must settle for daytime images that are less sharp and rich, or nighttime images that lack consistent illumination and range. CORE Dual Sensor (DS) Technology gives users two image sensors—one optimized for sharp and rich images during the day, and the other optimized for images with consistent and further illumination at night. With two sensors, the CORE DS leads the pack night and day.



CORE Trail Cameras offer 24-MP performance and come in Low Glow and No Glow models. The CORE Low Glow offers 100-foot night range, while the stealthy CORE No Glow produces an 80-foot range with nearly invisible black LEDs. Both cameras feature 0.33-second trigger speed, 1-second recovery and 1080p at 30 fps video with audio. A removable battery tray holds six AA batteries, providing up to one year of battery life.

CORE DS models offer 30MP performance and also come in Low Glow and No Glow models. Both cameras feature 0.2-second trigger speed, 0.6-second recovery and 1080p at 60 fps video with audio. An in-camera color LCD and the exclusive Dual Sensor Technology make the CORE DS Low Glow and No Glow models some of the most technologically advanced trail cameras on the market today. Recent searches on Amazon.com find the CORE for $138 and the CORE DS models in the $180 range. (bushnell.com)

Moultrie A-40

Moultrie's A-40 Game Camera is a 14MP digital still camera with alternative 720p video capability. It has 0.7-second trigger speed. Compatibility with Moultrie Mobile, at additional cost, allows remote monitoring from your computer or cell phone.

Backlit controls and an intuitive interface make setting up the A-40 camera simple in low-light conditions. It requires eight AA batteries that will last for up to 17,000 images. Power it with lithium batteries if you want maximum performance in freezing weather.

The A-40 sells for about $80, and it's a midrange version in a broad camera lineup that includes 17 models from the well-known game feeder company. (moultriefeeders.com)



Stealth Cam FLX

Stealth Cam just introduced a new trail camera designed to simplify on-the-go programming and wireless downloading. The all-new Stealth Cam FLX uses both Wi-Fi and Bluetooth technology, offering in-the-field and local network communication between the camera and mobile devices or nearby servers.

The FLX Bluetooth option lets the user access the camera from a mobile device for field use. The available Stealth Cam Remote app can automatically activate the camera's on-board Wi-Fi and allows photo and video download from 30 to 50 feet distant, as well as complete programming of the camera's numerous customizable settings. This is a noteworthy advantage, as it allows the user to access imagery or change camera settings without disturbing the camera set or contaminating the immediate area with scent.

In addition to the Bluetooth compatibility, the Stealth Cam FLX also allows Wi-Fi communication to a home-based server when the camera is within 30 to 50 feet. This makes the FLX ideal for capturing images and videos around home or camp. New photos can be programmed to download directly to the server at specified intervals, with notification alerts whenever new photos are uploaded.

The FLX itself is a highly sophisticated camera that delivers 30MP still images, 1080p video, and up to 512GB storage with an appropriately sized SD card. Several Stealth Cam technologies are employed to achieve this exceptional performance, starting with the 42 IR emitters with adjustable PIR range control, fast trigger speed (under 1 second), blur reduction, low-light sensitivity for vibrant images day or night and multi-programmable burst and recovery times to meet all monitoring conditions.

Whether you're keeping an observation site "clean" or just keeping an eye on things around home or camp, the new FLX is sure to deliver with its dual Wi-Fi and Bluetooth management systems. MSRP is $250. (stealthcam.com)

Stealth Cam WX Series

Stealth Cam takes "set-and-forget" trail cam technology to the next level with its WX Series wireless remote cameras. Access photos and videos at any time of the day, as well as control programming for this model Stealth Cam anywhere AT&T or Verizon cellular access is available.

The WXV (for Verizon networks) and WXA (for AT&T networks) cameras feature the latest in 4G/LTE data transmission technology to provide fast image and video transfer from remote camera locations to anywhere you have a network connection. With this technology, users can employ Stealth Cam's free Remote app to download photos and videos on demand, set transmission schedules, delete data from the memory card and control all camera functions and image management features without having to be on-site.

The WX technology even allows users to take on-demand photos remotely to instantly see what is happening at the camera set at any time, which is a terrific feature for impromptu hunt planning or for approaching an evening stand.

In addition to their state-of-the art communications capabilities, the WX Series cameras are also full-feature trail cams. Boasting 22MP photo and HD video recording and an SD card slot suitable for cards up to 512GB, the WX Series delivers superior imaging day or night. Adjustable PIR range control of the 42 No Glo IR emitters combine with Stealth Cam's Smart Illumination, Matrix Advanced Blur Reduction and Retina low-light sensitivity technology to ensure optimal photo and video captures after dark. Program customization includes burst modes and recovery time, as well as the ability to operate multiple cameras from a single log-in when using the Stealth Cam Remote App.

These cameras sell for about $200, and the monthly cell charge adds to the cost. Be sure you have adequate cell signal strength in the area where you intend to use this camera. (stealthcam.com.) ★




WILDLIFE
SYSTEMS
ESTABLISHED 987



TEXAS TWO STEP

FATHER AND SON take a trip to put the Remington 700 CP braced pistol to the test

BY TODD BURGREEN

MY initial interest in firearms was spurred by hunting with bolt-action rifles, and my 15-year-old son's blossoming obsession for hunting has allowed me to revisit my own youthful memories. When the opportunity arose to be one of the first to field-test the 6.5 Creedmoor Remington 700 CP (Chassis Pistol) with a factory-installed brace via a Texas hunt, there was no hesitation—especially when my son Ethan was encouraged to attend as well.

Game-Changing Potential

For me, at least, the braced Remington 700 CP gave me an immediate "aha!" moment. The 700 CP braced pistol heralds how "braced pistols" could potentially turn the hunting-weapon genre on its ear—similarly to what braces did for assault-type weapons. The SB Tactical adjustable brace fitted to the 700 CP maximizes the capability offered by the Remington 700 CP pistol in the same way it does when installed on an AR or AK.

What struck home to me almost immediately were the benefits of a 12-inch barreled bolt-action pistol when taken afield. An AAC Jaeger 30 suppressor direct-threaded onto the muzzle only sweetened the deal. Here was a compact, suppressed platform that would prove deadly effective in most hunting scenarios. What's not to like with a hunting weapon that can be wielded in tight spaces (think hunting blind) that is also socially polite when fired thanks to the AAC Jaeger suppressor?

The Remington 700 CP is a reflection of our times with its chassis, M-LOK forend, detachable 10-round AICS-style magazine, pistol grip, Picatinny rail, threaded barrel and brace. The 12.5-inch barrel gives an overall length of 21.75 inches before adding the brace or threading the suppressor, which brings the length to 43 inches. Even with the brace and suppressor mounted, the overall length remains shorter than your typical 24-inch bolt-action rifle. It weighs approximately 7.5 pounds when fully kitted out. A Zeiss Conquest V4 4-16x44mm scope with ZBR-1 reticle anchored with Talley rings proved a great addition atop the Picatinny rail.



Texas Time

The Wildlife Systems' S Ranch located 40 minutes out of San Angelo, Texas, proved ideal for a father-son hunting experience as well as for exploring what the Remington 700 CP had to offer. The weather was surprisingly brisk for our late-October hunt; I was colder in Texas than I was in Wyoming the week before while chasing antelope. We were glad we didn't confine ourselves to carry-on-only airline travel with the extra layers of clothes we very much appreciated in the mornings and evenings.

Hunting on the S Ranch was a blend of safari-style and stand hunting. Whitetail deer were the main focus, with hogs and coyotes also targets of opportunity. While

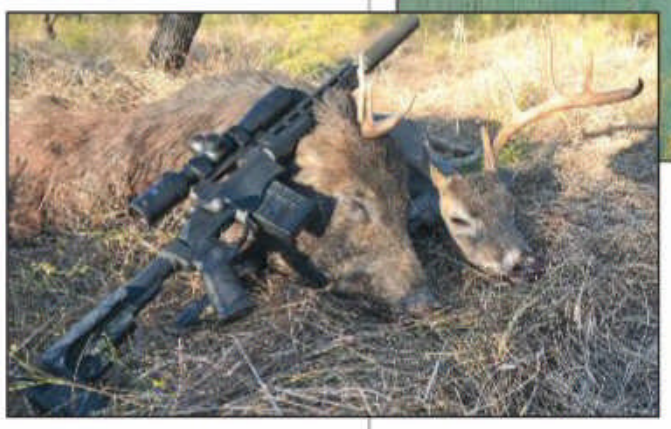
Remington had various rifle models on hand, such as the Model 7 and Marlin 1895 Dark Series lever action, I was told that the suppressed 700 CP braced pistol with the Jaeger suppressor was specifically for my use and evaluation.

Ethan and I could have hunted separately. He's more than qualified with several nice Virginia and West Virginia bucks to his credit since he started hunting with me at 8 years old. In fact, I stopped carrying a rifle with me during our hunts and now act more as a guide and pack mule. So, I left the choice to Ethan, who decided that more would be gained from joint excursions, and I was glad he chose this route. Of course, he got first dibs with the Remington 700 CP.

Upon our arrival in camp, we quickly made our way to the shooting range to verify zero as darkness was setting in. The guides were impressed when Ethan plopped down on the bench first without hesitation. The young man loves to shoot and has been doing it for most of his life. It was only natural for him to assume that he'd be the one to confirm zero. Remington 120-grain HTP (High Terminal Performance) Copper 6.5 Creedmoor tipped with Barnes TSX BTs was the supplied ammunition. An efficient 1.25-inch three-round group at 100 yards showed the need for a slight scope adjustment. The attached suppressor shifted point of aim from the factory zero, but that is to be expected.

Sitting In A "Beer" Can

Numerous qualities of the 700 CP were immediately appreciated on our first morning at the S Ranch. I've always been a fan of detachable magazines for safely and efficiently loading and unloading a bolt-action rifle. Every instance of moving in or out of a mode of transportation and in or out of a blind, which happens multiple times a day, requires weapon manipulation. The tight nature of the hunting stands is where the 700 CP came into its own. The ability to wield a suppressed 6.5 Creedmoor in a package shorter than most standard bolt actions was invaluable. The S Ranch had blinds situated with expected shots in the 100- to 125-yard range.





From a ground blind, a suppressor is also a good muzzle brake. The buck and hog killed within seconds were thanks to the Jaeger.

It was quickly evident that finding deer was not the issue at the S Ranch. Analyzing and choosing a nice buck out of the multiple candidates was the real chore. Tough problem to have, I know. Ethan had no trouble exercising patience as prospective bucks kept arriving in and leaving our area. All would have qualified for an immediate shot back east. But this all changed around 10 a.m. as our young guide became instantly agitated when a heavy-mass eight-point buck stuck his head out of the scrub oak. Our guide relayed in whispers how the eight-point was well above average for the area, and there was no debating the point when he was observed next to his peers.

Excitement ran high in the tight confines of the blind for the next 20 to 30 minutes as we watched the chosen buck slip in and out of sight or as other deer passed in front or behind him, preventing a shot. Conversation was made in hisses as Ethan steadied himself behind the Remington 700 CP, peering through the Zeiss Conquest optic with the guide and me never taking our eyes from our binoculars. Finally, the buck presented an opportunity for a clean shot. The guide barely got the words "Take him" off his lips when the AAC Jaeger suppressor coughed with a round headed downrange. The all-knowing thwack of a 120-grain bullet striking flesh was clearly audible. The eight-point collapsed in his tracks with unchewed food still in his mouth.

The blind erupted with backslapping and congratulations while the guide and I kept our eyes downrange on the crumpled buck. Ethan shucked a fresh round into the 700 CP, but there was no need, as the deed was complete. Smiles, fist bumps and hugs only experienced by fathers and sons commenced. The cliché of being proud of him comes closest to explaining the feelings that coursed through my head and heart. Ethan was patient and executed a perfect shot on a great animal. Seasoned adult hunters couldn't have performed better, let alone a 15-year-old, no matter how many deer they'd previously taken.

A round of photos followed by field dressing had us returning to camp with Ethan's buck to hang it up and begin

SPECIFICATIONS

REMINGTON 700 CP BRACED PISTOL

- **Caliber:** 6.5 Creedmoor • **Barrel:** 12.5 inches • **OA Length:** 27.75 inches
- **Weight:** 6 pounds, 13 ounces • **Grip:** Magpul MIAD, M-LOK forend
- **Action:** Bolt • **Sights:** Zeiss Conquest 4-16x44mm
- **Finish:** Black oxide • **Capacity:** 10+1 • **MSRP:** $1,120





processing it. The looks on the other guides' faces confirmed that we'd done well. Hasty measurement of the eight-point's rack generated a rough score of 138. This would stand as the best buck taken for our camp out of six hunters, including my own eventual 11-point.

The next couple days saw me passing over several nice deer in my quest to surpass Ethan's. It never happened. My 11-point did come with a nice story that further illustrates the benefits of the Remington 700 CP braced pistol with the Jaeger suppressor threaded on.

After much razzing about my pickiness, I made the decision to take a nice 11-point that featured a unique drop tine off his main beam. Getting a wild animal to cooperate with a broadside shot isn't as simple as it sounds. This was complicated even more when five wild hogs made a sudden appearance, scattering the deer. My 11-point buck was about to take off when a shot presented itself. The Barnes 120-grain HTP bullet slipped right behind his shoulder with a double lungshot.

After racking the bolt, Ethan whispered to me that a hog had remained out in the open probably wondering what had just caused that deer to nosedive into the turf 30 yards to his left. The suppressor had effectively mitigated the normal muzzle blast. The compact Rem 700 CP swung around as Ethan whispered, "Pop that pig!" in my ear. I quickly obliged. The deer and the hog ended up about 10 yards from each other, giving me a nice story to tell even if my deer came up short in the measurement department.

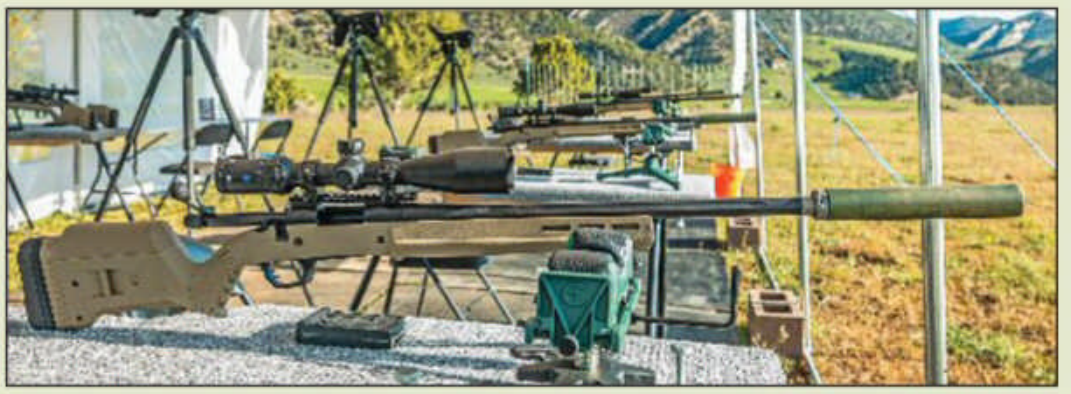
Memories To Last A Lifetime

The Remington 700 CP braced pistol with AAC Jaeger suppressor combo proved effectual not only at stand hunting but also in spot-and-stalk forays. Ethan went on to take a hog of his own along with a couple of does upon the request of camp members wanting to take delicious venison home. More mobile safari-style tactics were used to cover as much terrain as possible, and the 6.5 Creedmoor cartridge combined with the ergonomic Rem 700 CP proved potent.

Hunting is a passion of mine. Firearms, particularly rifles, are another joy. My youngest son has inherited both of these loves, and as such, Ethan and I will always remember our time in Texas. Even as life tests us and we do not always see eye to eye, we will have this shared time together to anchor us. Ethan said it best when we were waiting to board the plane in San Angelo to take us back to the real world: "Can't we just stay in Texas?"

I was certainly amenable to the idea, but I knew better than to entertain the hope. He smiled and said to me, "Thank you for an awesome time." And that's what it's all about. For more information, visit remington.com. ★

Advanced Armament's Jaeger 30 Suppressor





The AAC Jaeger 30 is purpose-built for hunting use with bolt-action and single-shot rifles; it is not intended for high-volume fire. The Jaeger 30 direct-threads on the rifle's muzzle and is kept light at only 13.9 ounces. Its length is 9.28 inches; its width is 1.47 inches. The Jaeger 30 features a Grade 9 titanium mount and blast baffle. The outer tube and monolithic core are machined from 7075-T6 aluminum.

The black-anodized titanium mount is the strongest component of the suppressor, and it carries the serial number and data panel. This is an important nuance in case the outer tube and/or baffle system is damaged out in the field. These parts can be repaired without involving BATF procedures for shipping and/or replacement work. The 5/8-24 threads of the Jaeger 30 are compatible with the majority of threaded .30-caliber hunting rifles. The 7075-T6 aluminum tube and monocore are finished with hard-coat anodized Type 3 OD Green.

The price cannot be beat with an MSRP of $450. Using the Jaeger in the tight confines of Texas blinds proved advantageous not only for the obvious reason of lessening muzzle blast for the rifleman's benefit but also for eliminating the sound signature for the animal to zero in on. The Texas experience of taking both buck and hog within a few seconds of each other would not have happened without the Jaeger suppressor. (advanced-armament.com) —*Todd Burgreen*



GOOSE

Waterfowl hunting has changed a lot since I was 12, hunkering in the sapling pines lining the edge of the country club lake behind my house, a single-shot 16 gauge in hand.

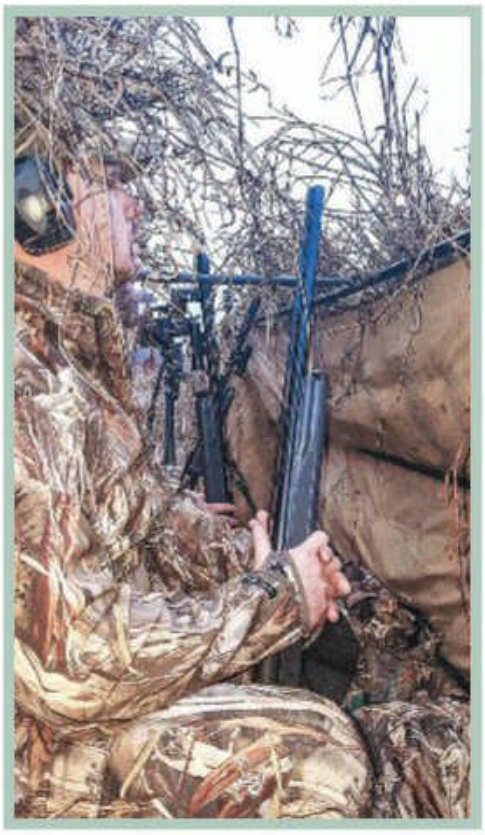
Back then, the same No. 6 lead loads I used on rabbits and squirrels served to splash a few wood ducks and buffleheads, too.

I still own the old Bridger Gun Co. shotgun and the Zara Spook topwater bass plug I deployed from a Zebco 202 fishing rod combo to snag dead ducks and reel them to shore. Like most duck hunters, I made the transition to steel shot begrudgingly, owing to its anemic performance compared to lead. Improved guns, chokes and loads have been game changers in the waterfowling world over the past 25 years, and I recently got a chance to wring out Savage Arms' latest scattergun on a goose hunt to see if it could live up to today's upward trend in firearms technology.

Slogging through winter wheat fields in late February, more Arkansas gumbo clung to my boots with every step in the predawn blackness. The strain of each step was quickly forgotten as the calls of thousands of geese urged a gaggle of gun writers across the field toward a hurriedly-set A-frame blind and hundreds of decoys. Each of us carried Savage's new Renegauge 12 gauge to battle a too-numerous feathered plague.

Light geese aren't only a nuisance to Arkansas farmers. They have become so abundant that they are destroying their nesting grounds in the Arctic Tundra. Not only are the geese eating themselves out of house and home, they're destroying critical habitat for other species that share the arctic tundra. Biologists can conduct eradication efforts to balance the population, but do so only as a last resort. Increased hunting opportunity is the first wildlife management tool biologists turn to because it costs very little to implement and is much more socially accepted than







It's time to go Savage Renegauge on snow geese in Arkansas

BUSTERS

BY JAY LANGSTON



The action was fast and frequent during Arkansas' Conservation Order late-season hunt designed to help thin greatly overpopulated light geese.

other population control measures. These Conservation Order hunts are held in many states, start in early October and hopscotch dates until late April.

The conservation order is designed so hunters can reduce snow, blue and Ross's goose numbers through increased harvest. Because of the extreme need for more harvest, many waterfowl hunting regulations are relaxed during the order. Shooting hours are from 30 minutes before sunrise until 30 minutes after sunset. No daily bag limit or possession limit is in effect, and hunters can use unplugged shotguns and electronic calls. Also, hunters do not need a Migratory Bird Hunting and Conservation Stamp, Arkansas Waterfowl Stamp or HIP registration, but they must have a valid hunting license from any state.

The birds didn't disappoint, and this small group of hunters was able to hammer more than 80 snow, blue and Ross's geese in three mornings with mixed weather conditions. We had several 100-count packs of Federal Speed Shock 3-inch magnum 12-gauge BB loads available, but I was surprised at the shooting ability of the group as a whole. I was happy to bring home a 120-quart cooler of goose meat to enjoy over the next few months. We were able to put a few pre-production Renegauge shotguns through their paces, and the general consensus was that the new Savages were



“The barrel is fluted for a nice touch, and it

sturdy hunting guns. To share some full disclosure, I shot the same gun all three days to get a good feel for its performance. It took a couple of volleys to get it to feed reliably. Once I had put 10 rounds through it to smooth things up, it ran like a sewing machine in snow, sleet and freezing rain for more than 200 rounds over three mornings.

Gun Details

What sets the Savage Renegauge apart from other 3-inch magnum 12-gauge shotguns is its Dual Regulating Inline Valve (D.R.I.V.) gas system. The Renegauge has even more adaptability built into its action. The D.R.I.V. gas system takes only the pressure it needs from each shot to cycle the action. Any excess pressure is vented through the front of the gun. The result is a fine-tuned action that can cycle low-recoil target shells as easily as it cycles magnum hunting loads, and with no need for user adjustment.

The manner in which it works is pretty straightforward. A forward gas block assembly attached to the barrel



actuates a slider assembly behind the gas block, which extends into the receiver. Upon firing, the shotshell’s explosive gases in the barrel are diverted through two ports into the gas block assembly, specifically into a pair of lateral pressure relief valves positioned on both sides of the barrel. The pressure relief valves incorporate a gas pathway to a piston chamber. A piston is forced to the rear and engages a slider of the slider assembly that is linked to a breech block in the receiver.

It’s actually pretty common stuff for

wears a melonite finish for more corrosion resistance."

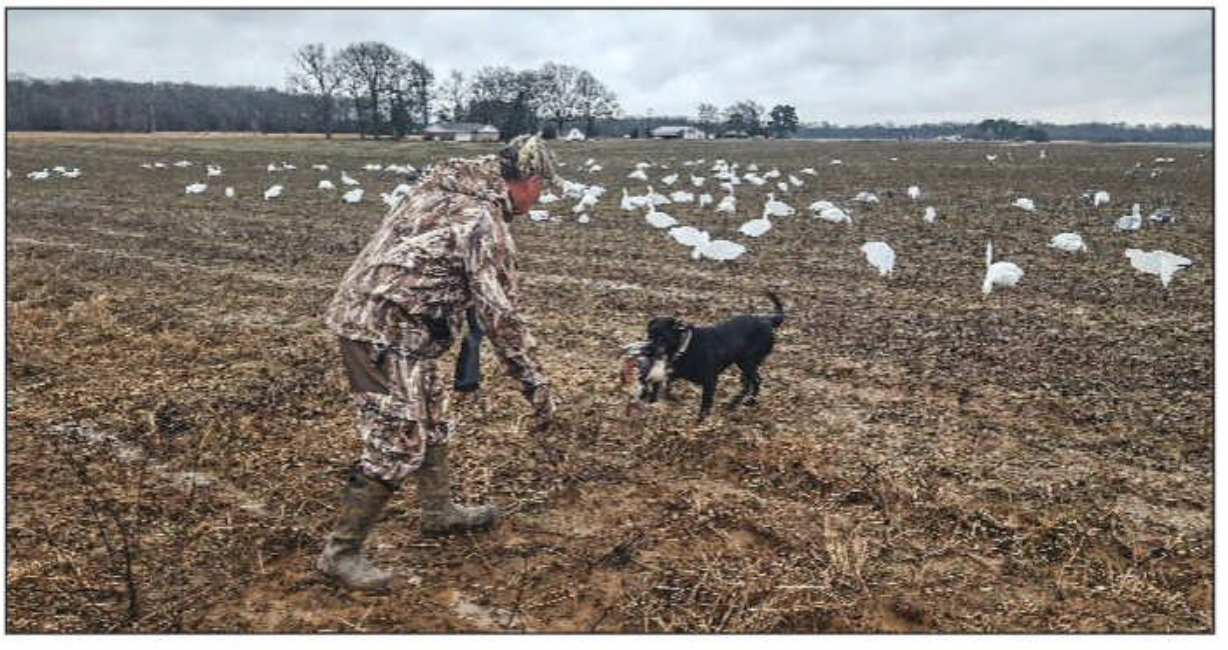


a gas-actuated semi-auto. Here's where it gets interesting. The dual pressure relief valves actuate to moderate and limit the gas pressure that enters the piston chamber when using shotshells of different power levels, thereby providing consistency in the recycling operation. The pressure relief valve assemblies consist of a perfect symphony of meticulously shaped valve bodies holding plungers and springs that work together to provide a gas impulse that's within a certain range. It is just enough to drive the bolt back on its extraction cycle with light loads, and less than the threshold that would allow the combined assembly to damage itself with heavy magnum loads.

"Renegauge can do it all," Jessica Treglia, senior brand manager at Savage Arms said. "With the D.R.I.V. gas system, shooters can go from the range to the hunt without making any adjustments to the gas system."

Once Savage figured out the operation system, the company added several more features. Its stock is adjustable for length of pull, comb height, and drop and cast, which allows a fit to the shooter. This makes a big difference with a shotgun that is designed to be pointed rather than aimed. In all actuality, the shooter's dominant eye is the





The best way to put a new shotgun through its paces is to let a dog mash it into the Arkansas gumbo a few times and see if it still shoots.

SPECIFICATIONS

SAVAGE RENEGAUGE

- **Gauge:** 12 • **Barrel:** 26 or 28 inches • **OA Length:** 49.5 inches
- **Weight:** 8 pounds • **Stock:** Synthetic adjustable • **Action:** Semi-auto
- **Sights:** Vent rib, fiber-optic front • **Finish:** Melonite
- **Capacity:** 4+1 (2¾-inch) • **MSRP:** $1,149









1&2) The bolt head on the Renegauge features a rotating lock-up mechanism similar to other guns with inertia-driven actions. Couple that with a gas system that handles loads ranging from low-brass target fodder to magnum goose getters. 3) Proper fit between gun and shooter is critical to making hits. This model offers adjustable cheek risers and length of pull inserts. 4) A fluted barrel is a nice touch. 5) What's better than a muddy goose gun and a blind full of like-minded hunters?









“The Renegauge takes a few steps forward with the D.R.I.V. gas system.”

rear sight when shooting a shotgun, and precise, repeatable mounting of the gun is requisite to being able to hit what you are looking at…most times. Every Renegauge is built with Savage’s commitment to refined ergonomics. The fit of a Renegauge can be adjusted 20 different ways. From the length of pull and the comb height to the drop at heel, the stock can expand or contract as needed.

Chrome-plated reciprocating components, such as the action bar assembly, make this an all-weather waterfowler that requires constant maintenance to keep it from rusting. A stock rod buffer helps reduce felt recoil, which is nice with heavy magnum loads. The barrel is fluted for a nice touch, and it wears a melonite finish for more corrosion resistance. In times past I’ve had issues with softer aluminum barrel ribs getting bent on guns that see hard use (or gorilla-like airline baggage handlers). Savage strengthens the gun’s vent rib by making it from carbon steel. To make sighting easier in dim light, a red fiber-optic sight is an added touch.

Savage also kept competitive shooters in mind when crafting the magazine port, since this gun will probably see use in more than a duck blind. Its oversized safety and bolt handle are easy to find when you’re in a hurry, too. Three interchangeable flush-mount choke tubes (IC, M, F) are the common Beretta/Benelli pattern, so it will be easy to find aftermarket chokes, too. This rig comes packed in a hard-sided carrying case to protect your investment.

The American-made Renegauge Field comes available with a 28- or 26-inch barrel. Soon to be released are camouflaged versions for the turkey hunter.

After spending four years working inside an Italian gun company that’s legendary for building reliable field shotguns, I learned a thing or two about what makes a good waterfowler. The Renegauge takes a few steps forward with the D.R.I.V. gas system if you don’t enjoy getting pounded with recoil and want a trusted hunting companion. For more info, visit savagearms.com. ★

SPEED LOAD UP

TO PUT THIS SHOTGUN through its paces and flog a pile of geese, Federal’s Speed-Shok 100-Packs were put into action. New Speed-Shok 12-gauge 100-packs come in Federal’s most asked-for payloads, delivering both the performance and convenience hunters need. Recently redesigned, these 3-inch magnum Speed-Shok loads fill limits faster and cleaner than before, thanks to their lead-free Catalyst primer and faster-burning powders that dramatically reduce residue.

These 1.25-ounce loads exit the muzzle at a zippy 1,450 fps, which helps reduce the lead needed on fast-flying waterfowl.

We used BB loads for these late-season geese, but No. 2 and No. 4 shot are available, too, for ducks. The MSRP for a 100-round box is $64.99.

—Jay Langston



MUZZLELOADER HUNT

A MAINE



EVENT

Tracking down BIG BUCKS with big-woods smarts and T/C firepower

BY BILL VAZNIS

IT was the last day of Maine's late black-powder deer season, and New Hampshire resident Jeff MacLauchlan and Vermont resident Dan Masterson awoke to see a bit of fresh snow on the ground and a thermometer showing the air temperature in the mid-20s. After an autumn of unusually warm weather, it looked like they would finally have a good day in the woods, a day when the deer would be up and moving around. With any luck, they would bump into a mature racked buck still in the rut.

This was MacLauchlan's second trip to #9 Lake Outfitters in Aroostook County. He had hunted Maine nearly a decade earlier.

"It was right after my brother Scotty died unexpectedly," MacLauchlan recounted. "We were close, so in memory of him that fall I grabbed his Browning lever-action .308 and headed for the Maine North Woods. It was 15 degrees out, and I was still hunting along an old logging road. 'Scotty,' I said to myself, 'show me something I have never seen before.' A few minutes later, a huge buck jumped into the road 80 yards in front of me. I quickly shouldered Scotty's rifle, and shot. I knew it was a big deer, but when I walked up to him I couldn't believe my eyes. It was a one-of-a-kind behemoth 4x6 with a drop tine and heavy palmation. 'Thanks, Scotty,' I said to myself. 'I have never seen a drop-tined buck before!' It later dressed out at 210 pounds and scored 143 3/8."

Back On The Tracks

Now, not all wilderness bucks are so easy to kill, and MacLauchlan and Masterson have killed enough big-woods bucks over the years in Vermont and New Hampshire, not to mention Maine, to back up that statement. But this trip back to #9 Lake Outfitters seemed special somehow. How special? They would just have to wait to see how it would unfold.

"After breakfast that last day of the season," said MacLauchlan, "we cruised old 4x4 logging roads hoping to cut a fresh track. Near the end of one dead-end logging road we came across the tracks of a buck that was chasing a doe back and forth across the road and into a marsh. He was pushing the doe pretty hard, and she was playing hard to get. It took time to unravel the trail. We were pleased the rut was still on, being it was the first week in December.

"We followed the track through some thick spruce, but he stayed mostly on old logging

iStock Photo

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Hunting big northwoods bucks is always challenging, and is made even more so when using a muzzleloader. The payoff for the patience and perseverance required for success comes in the form of a trophy-caliber buck.



roads until he broke into an area that was a little bit open with pine and spruce scrub brush interlaced with raspberry and blackberry bushes.

"It was very flat and difficult to see very far, maybe 40 yards at best in any one direction. We had to take our time and walk as silently as we could, expecting to see them bedded down and afraid we would bump them. After a half-mile of tracking and an hour and a half later, we came onto a bunch of doe tracks. It took us another 15 minutes to sort it all out.

"One of us would stand still and the other would loop a quarter of an arc, 90 degrees, if ever-increasing distances, and then we would switch places. Dan found the track on his last loop. The group of does had a buck with them, too, but it was not a big track and we decided to stay with the bigger and fresher track, the one we were originally following.

"We sneaked along another 75 yards and got into some real thick stuff. We could see where the buck left the doe, so Dan followed the doe and I stayed with the buck. Suddenly it opened up into a large circle of open hardwoods. These are the kinds of places you have to pay close attention to. The buck could be bedded on the periphery or on an elevated patch where he could see his back trail. I stayed still for 15 minutes and then used my grunt tube in an effort to get him to expose himself, but he was not there."

Closing The Deal

MacLauchlan continued, "We crossed 50 yards to the other side of the hardwoods with our eyes wide open looking for the buck. Both deer were meandering now, and we knew he had to be nearby. I followed the buck track around a log and then looked down an old logging road. There he was! At first I thought it might be a moose, but I saw his huge rack and instinctively swung my first-edition .50-caliber Thompson/Center Encore with a walnut stock to my shoulder at about the same time he looked over at me. As I peered through the Bushnell scope I could see a 4-inch balsa sapling blocking his shoulder. I moved the vertical line of my scope an inch or two to the right…and BANG! A 300-grain Lock 'N Load Speed Sabot SST ML pushed by three pellets of 777 powder found its mark and blew a hole dead center through the buck's heart.

"The buck took five bounds away and ran into a tree and then died hugging a fallen log. Measured by my GPS, it was a 117-foot shot. Later we realized the buck was backtracking his own spoor, probably because he heard my grunt tube. He had a heavily palmated one-of-a-kind eight-point rack with a broken ninth tine, and later dressed out at 217 pounds, and even with short tines scored 134 3/8.

"'That was the funniest thing I ever saw,' Dan told me later. 'I was standing 5 or 6 yards away when you shot, and when I turned around all I could see was two legs and a gun barrel sticking out of a ball of smoke!'

"We both laughed, but inside I couldn't help wondering, hoping, that Scotty also saw me shoot."

Track 'Em Down

Tracking bucks down in the snow takes patience and perseverance. Sooner or later you will catch a buck bird-dogging a hot doe, and since his senses are far superior to ours, you will invariably jump him. He will high-tail it out of sight before you can even shoulder your gun, and then you are left with a choice to make: Should you take after the buck, or let things settle down and start trailing the doe?

Long-time deer trackers will sit on a log and wait 20 minutes or so, by their watch, and slowly take after the doe. Why? Because that is exactly what the buck is going to do once he is sure you are no longer looking for him. He will run for several minutes, slow down, loop and check his back trail several times before circling around and begin looking for the doe. And with any luck, you will be there waiting for him. ★

TESTING THE T/C PRO HUNTER FX

Nearly 10 years ago, Thompson/Center expanded its line of muzzleloaders with the introduction of the Pro Hunter FX. Its most notable feature, and what separates it from other T/C muzzleloaders (like the Encore used by the Mainers) in the line, is its fixed .50-caliber barrel, which is not interchangeable with other barrel configurations. Instead, the muzzleloader sports a 26-inch fluted barrel with patented Quick Load Accurizer (QLA) for enhanced accuracy.

Other notable features include the muzzleloader's improved handling and recoil reduction system made possible by the FlexTech stock and forend. Inside the FlexTech stock four Energy Burners, along with the recoil pad, allow the stock to slightly compress when firing, helping to reduce felt recoil by 42 percent. If you are a small-frame shooter, you will appreciate this feature.

Additional features include the Speed Breech 3, a triple-lead hand-removable breech plug. Through the use of the anti-seize Speed Breech 3, no tools are required for removal, allowing shooters to take out the breech plug by hand.

The Pro Hunter FX also comes standard with fiber-optic sights, along with a Swing Hammer that can be conveniently positioned toward either side of the frame, enabling easier access to the hammer once an optic has been mounted.

To protect the muzzleloader against inclement weather, Thompson/Center has added its tough-as-nails Weather Shield finish. When applied to the barrel, receiver and other critical parts, the Weather Shield adds an extra level of protection against corrosion, extending the gun's lifetime.





The author's T/C Pro Hunter FX is light, soft recoiling and plenty accurate to put the bullet right where he wants it on big, mature whitetails.



Weighing in at 7 pounds, the Pro Hunter FX measures 42.5 inches in overall length and features a 14-inch length of pull.

The Scope

For optics, I chose a Bushnell Trophy 3-9x40mm DOA 250 muzzleloader scope in matte finish. Its one-piece tube is nearly indestructible, making it quite dependable in the field. And it boasts a 91 percent light transmission, an important feature when hunting in thick bush. Indeed, upgraded fully multi-coated optics deliver ultra-bright images at those precious moments between dark and almost dark.

Butler Creek flip-up caps, which are included with the scope, shield your lenses from precipitation and fogging. Get into the habit early of flipping the caps before you bring your muzzleloader to your shoulder, or all you will be looking at is a black circle and wondering where the buck went.

The scope is 13 inches in length, with a mounting length of 5.9 inches, and weighs 14.3 ounces. Field of view is 33 feet at 100 yards on 3x and 11 feet at 9x, with an eye relief of 5 inches. Click value is 0.25 inches at 100 yards. Of course, the Trophy XLT is dry nitrogen filled and 100-percent shockproof, dustproof and waterproof. You may not fully appreciate these time-honored qualities in a premium riflescope until you get on the trail of a racked Northwoods buck. You will undoubtedly fall down hard more than once in a season, and you will undoubtedly be on the trail during heavy snow and light rain, conditions that will ruin a lesser scope.

At The Range

It did not take long to sight in the FX, using two 777 Magnum pellets from Hodgdon and Thompson/Center 250-grain Shock Wave Sabots for each load. Starting at 20 yards and working out to 100 yards to get dialed in, the FX's mild recoil makes it fun to shoot all afternoon.

But bench shooting after your gun is sighted in is not the kind of practice you need for wilderness whitetails. You'll often have to shoot from unorthodox positions at unknown yardages over uneven terrain. You rarely have time to secure a rest. Indeed, most opportunities present themselves for a matter of seconds, forcing you to shoot off-hand as a wide-racked buck breaks for cover. And that shot will be less than 50 yards most of the time.

I sight my wilderness blackpowder rifles to hit dead-on at 50 yards, and then use the DOA for longer distances, such as when you catch that buck you have been tracking loping across a clear-cut 150 yards out.

The trick for any off-hand shot is to pick an aiming point before you shoulder your muzzleloader, and when the crosshairs slide into the point, squeeze one off. Practice the maneuver until it becomes second nature to you. —*Bill Vaznis*

SPECIFICATIONS

THOMPSON/CENTER PRO HUNTER FX



- **Caliber:** .50 • **Barrel:** 26 inches • **OA Length:** 42.5 inches
- **Weight:** 7 pounds • **Stock:** Composite
- **Sights:** Adjustable Williams fiber optics
- **Finish:** Weather Shield • **Capacity:** 1 • **MSRP:** $649



Feral hogs may carry brucellosis, which can be transmitted to humans. Wear latex gloves when handling or cleaning wild hogs. **(Right)** Outdoor writer Larry Weishuhn with a fine boar taken with a Thompson/Center rifle. Wild boar with 4- to 6-inch tusks are not uncommon.

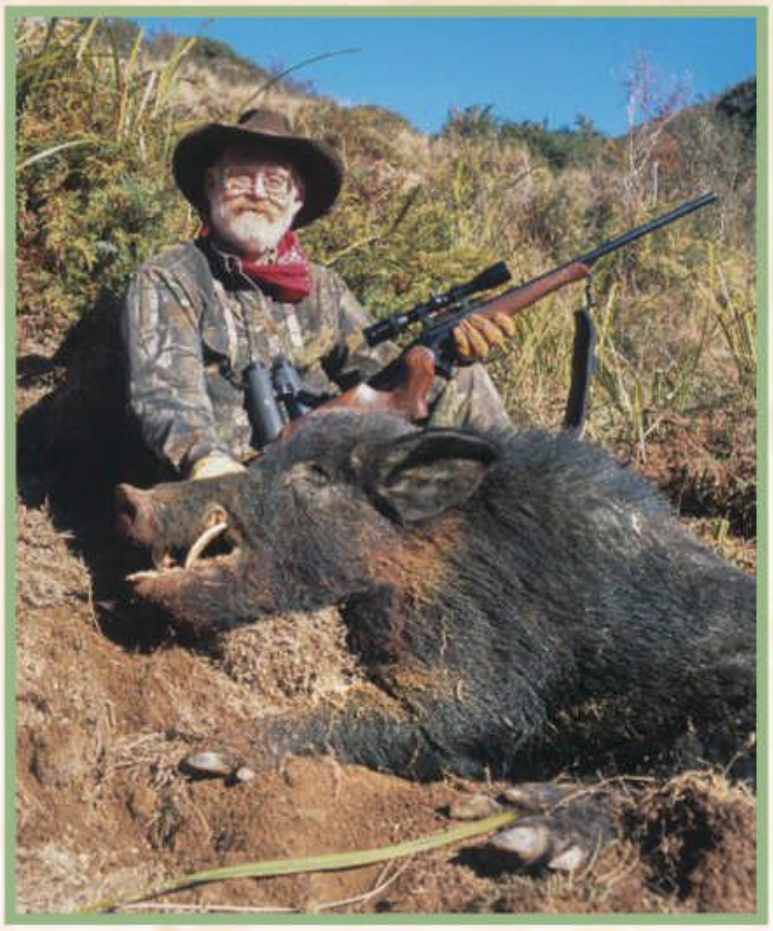
BIG BORES FOR BOARS

Hit wild hog country with traditional lever guns and hand cannons

BY J. WAYNE FEARS

Many hunters equate wild hog hunting to grizzly hunting at a fraction of the cost. It's exciting, usually occurs at close range and is best done with big-bore calibers firing heavy, deep-penetrating bullets that carry a lot of energy to the target.

Feral hogs have been called the "low-budget grizzly," and with good reason. Feral hogs, both boar and sow, can be dangerous animals to hunt under the right set of circumstances. Due to their size, build and sharp senses, they can test the hunter's skills and the knockdown power of many calibers. I've seen a large boar take a hit from a .308 Winchester and stay on its feet, ready to fight. They do have some of the same "pucker factor" qualities of a grizzly at a much lower cost.



Feral hog populations in the U.S. are soaring, and while they're a problem to rural landowners, they offer a great hunting opportunity to those who like to use big-bore calibers. Also, since they're considered a nuisance animal in most states, they can be hunted year-round.

Lever-Action Rifles

Wild hogs are built to be tough. Their body build resembles that of a buffalo, being higher and heavier in the shoulder region. For defense, the wild hog has some formidable armor in the form of an extremely thick layer of cartilage over each shoulder. On large hogs, it can stop most small-caliber or poorly constructed bullets.

The boar is armed with long canine tusks that protrude from the lower jaw. The length of these tusks can reach up to 6 inches or more. Mounted on a plaque, they make a great addition to any trophy room. These tusks are razor sharp and can be deadly to hunters and dogs alike.

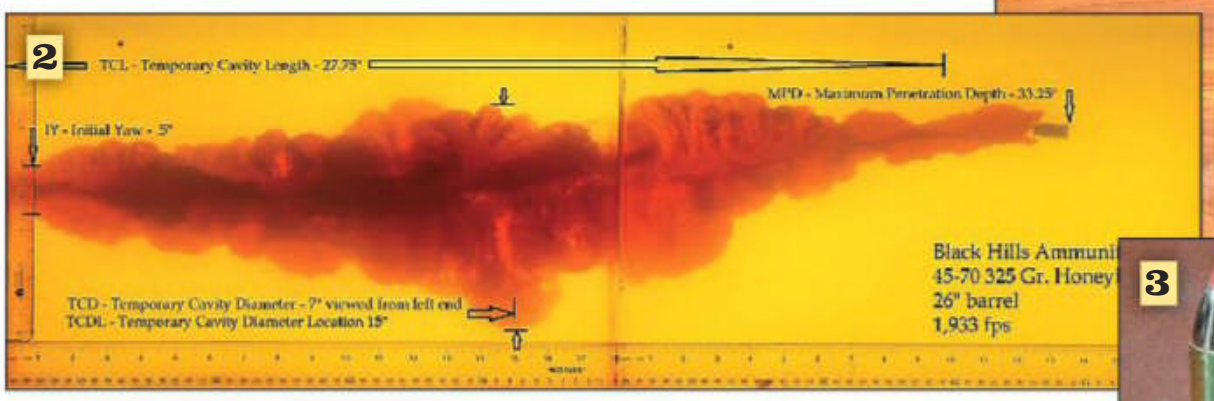
An extremely large feral boar might weigh 600 pounds or more, but it doesn't have to be large to be mean. I've seen an 85-pound sow with piglets put up a good fight and prove difficult to put down for keeps.

Close-range boar hunting is an ideal opportunity to use the modern version of the traditional lever-action rifle to shoot deep-penetrating bullets. The .45-70 Government shooting Black Hills 325-grain HoneyBadger, Hornady 325-grain FTX LEVERevolution or Garrett 420-grain SuperHardCast Hammerhead ammo can be deadly to big boar. The .444 Marlin shooting Hornady 265-grain FTX LEVERevolution, the .35 Rem shooting Hornady 200-grain FTX LEVERevolution or even the .30-30 Win shooting Hornady 160-grain FTX LEVERevolution with good shot placement at short ranges can be ideal hog killers, just to name a few.

Hand Cannons

While I've taken short-range wild boar with a variety of handgun calibers, including .454 Casull, .41 Magnum, .44 Magnum, .45-70, .375 Win. and .35 Rem., when hunting large hogs, I usually elect







1) The T/C Contender equipped with an SSK .375 JDJ barrel can make an excellent hog gun with the right loads. 2) Deep penetration is a must to stop a large hog. The Black Hills .45-70 HoneyBadger penetrated this ballistic gel 33.25 inches and gave a wide wound channel. 3) Some big-bore calibers popular with hog hunters include (L to R) .45-70 Govt, .450 Marlin, .444 Marlin, .375 Win. and .375 JDJ.

to use my Thompson/Center Contender frame equipped with an SSK Industries 14-inch barrel chambered in .375 JDJ. Yes, it's a single-shot handgun, but when good shot placement is employed, one shot is usually enough for even the largest boar.

The well-known .375 JDJ wildcat cartridge is an interesting hunting cartridge for the handgun. It's formed by necking down the .444 Marlin case to a .375. It has a reputation for putting down elephants, Cape buffalo, moose, elk and grizzly bear, as well as wild boar. As one might expect, the .375 JDJ cartridge generates a lot of muzzle blast and recoil, but SSK Industries ports the barrel so that both are manageable. Shooting my .375 JDJ Contender is about like shooting a heavily loaded .44 Magnum.

One of my most memorable hunts for wild boar using the .375 JDJ came when a hunting-guide friend, Johnnie Hudman of Albany, Texas, called one spring morning. During the conversation, he told me that with all the rain they'd had around Albany, the hogs had plenty to eat and he was seeing lots of boar with 3-inch or longer tusks. His invitation to a handgun hunt was quickly accepted.

Within a few days, I was on a canyon rim with Hudman watching a beautiful Texas sunrise. Far below, in a prickly pear flat near a dry wash, we watched five large hogs feeding. Trophy judging was impossible as the broom weed was so high, thanks to all the rain, and it hid the hogs' heads. We elected to work our way around the canyon until we got the wind in our favor and then stalk up to the hogs to get a better look.

It took us the better part of the morning to get within 50 yards of the hogs. We were hidden in the branches of a mesquite tree using a limb to steady our binoculars when the hogs reached an opening in the grass. "No long tusks," Hudman whispered. "The only tusk showing is on that next-to-the-last hog, and his tusks are only an inch or so." I agreed, and we eased out of the flat and started the long walk back to his truck.

Mid-afternoon found us bumping along a rocky ranch road to a high ridge where one of the ranch cowboys had seen several large boars. Since daybreak, I had studied some 70 hogs, but I hadn't found one I wanted.

Spotting The Big Boy

Suddenly, Hudman stopped the truck and grabbed his binoculars off the dashboard. "There are three big hogs on that grassy slope," he said as he looked out his truck window. All I could see were two black dots in the grass some 600 yards away.



When hunting wild boar in open country covered in tall grass, a set of cross-sticks is a valuable shooting aid for any hunter.

"Are you up to a long stalk?" he asked. "We'll have to go around the hill they're on and come up over the hill above them to keep the wind in our favor," he added.

I didn't answer, but I got out of the truck ready to go.

It took us almost an hour to go around the hill. The stalk took us across a grassy pear flat, and we were covering ground fast when Hudman dropped to the ground and put his finger to his lips. There in the tall grass just 35 yards in front of us stood several hogs. I quickly set up my cross-sticks and prepared for a possible shot as Hudman studied the uneasy hogs. They'd heard us but didn't know what we were.

"There's a boar in the bunch with about 2.5-inch tusks," he whispered, "but the rest are sows and pigs."

"Let's ease around them and go for the big boy," I whispered. Hudman nodded, and we backtracked and went around the hogs.

Soon, we were crawling on our knees to peer over the hill. "Damn," Hudman whispered. "They've moved all the way to the bottom of the hill. We'll have to take advantage of all the cover available to us."

Slowly, my hunting buddy and I picked our way down the hill and stopped just before reaching the flat. Using our binoculars, we studied the hogs. Two were big boars with long tusks. One was a black-and-brown boar with tusks that I estimated were over 4 inches long. This was the hog I had come to Texas to hunt.

They were feeding some 250 yards

away, and I wanted to close the distance as much as I could before I shot. So, the slow crawling began. As I observed the wind, I also watched where I put my hands and knees, as there were low-growing cacti everywhere, and it was warm enough for rattlesnakes to be out.

I crawled from mesquite bush to mesquite bush—200 yards, 150 yards and 100 yards. At each bush, I checked on my target's whereabouts. At a dead tree some 75 yards from the feeding boar, I stood up to check on him when an unseen hog just to my right squealed and ran. The big spotted boar raised his head and looked my way. There was no time to consider what to do next. I laid the .375 JDJ Contender on a sturdy limb, cocked the hammer, found the boar's shoulder in the scope, placed the reticle on the lower part of the shoulder and squeezed off a round. I heard the bullet smack the hog, but looking through the scope, I saw nothing due to the recoil.

Looking back at Hudman, I saw a blank look on his face. "I was too low to see the hog well, but I saw dust fly off him. I think you rolled him," he reported. "Let's wait a few minutes."



Wild boar can make an interesting mount.

I reloaded and we waited about 20 minutes.

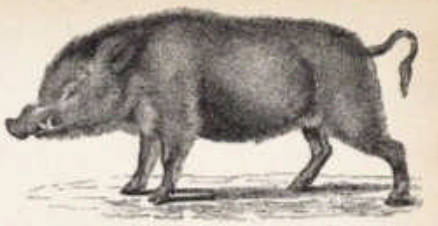
"Let's ease up there slowly, and keep that hand cannon ready," he whispered.

We made the walk watching in every direction for any sudden movement. As we neared the last place where I'd seen the hog, I spotted him, down for the count. The .375 bullet had gone through both shoulders.

"He'll make a really good tusk mount," Hudman said as he leaned down to examine the tusk. "They might make 6 inches."

Wild-boar hunting is becoming much more plentiful throughout much of the country, and the good thing is that it is usually available during the off-season. So, get out there and see for yourself what trophies you might be able to add to your collection.★

Beware The DANGERS WILD MEAT



While feral hogs can be fun to hunt, there are some cautions that need to be understood: They can carry diseases that can be transmitted to humans. This report comes to us from the University of North Carolina's Cooperative Extension service and emphasizes the need to wear latex gloves when dressing wild hogs.

At his deer camp, a 27-year-old hunter field-dressed and quartered several white-tailed deer and feral hogs after a successful hunt. He was unaware that a wild hog he was cleaning was infected with bacteria that cause brucellosis and that he could contract this and other diseases simply by touching the contaminated meat. Since he wasn't wearing latex gloves, a nick or briar scratch on his hands or arms would provide enough of a cut for infection to result.

➤ The Infection: Brucellosis, commonly known as "undulant fever" in humans, can be transmitted from animals to humans by handling infected animals. Brucellosis is now rare among farm animals, although livestock veterinarians continue to wear gloves and take precautions.

The incubation period for brucellosis varies but averages two weeks in humans. Early signs are chills, fever, headaches, malaise, neck and back pain, diarrhea and muscle aches. These symptoms, particularly fever, will fluctuate for weeks. The victim will seem to get well only to have the symptoms recur, in many cases, frequently. Brucellosis is rarely fatal in humans, but serious complications can lead to meningitis, encephalitis, liver disease and spinal cord damage.

➤ Symptoms: At first, the afflicted hunter complained of back pain, and his physician, believing that he had pulled a muscle, prescribed pain killers. When this medication was ineffective, the hunter was admitted to the hospital for tests. Because bovine brucellosis has been nearly eradicated in the U.S. and its symptoms often mimic common diseases, the real cause of his ailment was not initially detected. The numbness and tingling in his legs and back became more and more pronounced. After several days of tests, the patient was walking across his hospital room when he collapsed to the floor. An MRI revealed a mass the size of a grapefruit growing from his spinal column and pressing into his lungs. After hours of surgery, doctors were able to remove the mass. Cultures taken from it finally identified the cause of his disease. Fortunately, the hunter recovered fully and was able to return to work.

➤ Play It Safe: The takeaway here is to practice safety first when in the field. Always wear latex gloves while cleaning and dressing wild game. When finished, scrub your hands and arms carefully with antibacterial soap to kill any lingering bacteria. Thoroughly cook all meat—from wild game to domestic livestock—before eating, and live to hunt another day. —*J. Wayne Fears*

The New Ol' .30-30



Hornady's new quiet and accurate Subsonic sure isn't your grandpa's deer fodder

BY FRANK MELLONI

IT seems that every time a new hunting cartridge is invented or an existing one improved, it's always being compared to .30-30 Winchester. This leads to the question, "Why not just stick with .30-30 Winchester, then?" Of course, there are many reasons why modern hunters flock to these new rounds, but at the top of that list is simple sound suppression. Many hunters foolishly opt not to wear ear protection in the woods, and this is safe, just as long as your equipment doesn't generate volume in excess of 85 decibels. Getting down that low takes some work, but proper ammunition is going to be half of the solution.

So, back to the ol' .30-30, a round made when hearing protection wasn't on the minds of most. For the longest time, there wasn't anything available to the hunter who wanted something quiet in the woods—until today. Hornady is always good for spotting these gaps and has turned its attention to this problem with the release of a subsonic hunting line starring .30-30 Winchester, among other woodland favorites.

The Inner Workings

A few hurdles needed to be overcome in order to build this accurate and reliable subsonic ammunition, but let's start with reliability. For a bullet to expand, it needs to be driven to a sufficient velocity to blow open once it hits tissue. Well, when you're reducing the speed to around 1,000 feet per second, you lose the solution of simply driving it harder. For this reason, Hornady started development with the bullet itself.

Hornady uses its new Sub-X bullet (also available as a component) that is built to expand at speeds as low as 900 feet per second and is really quite revolutionary. For starters, the jacket is tapered, with its thinnest portion up front by the flat meplat. This thinning of the jacket allows it to easily peel back once it impacts the target. The flat-point profile is also the best way to maximize surface area, generating the most "smack" when it hits flesh. All of this gorgeous expansion is initiated by the classic Flex Tip insert, which ensures that the hollow cavity doesn't fill with initial debris upon impact and also adds a touch of safety when stacked end to end in a tubular magazine.

The second challenge to building a subsonic round from an existing cartridge is dealing with all of that extra case capacity. Usually, subsonic ammo is built with a reduced charge, and when you subtract powder, you add air. The problem here is that if the powder column isn't consistent, then it will experience erratic ignition and result in erratic velocities. To solve this problem, Hornady used some sort of mystical freedom flakes that I've never seen before. It's somewhere between ball-type and flake-type powder. If you imagine taking hollow balls and splitting them down the middle, you'd be on the right track. I found this design to be ingenious, as it will add that required volume yet



1



2



3



still flow accurately through automated powder dispensers utilized in producing ammunition. The use of the extra-long 175-grain bullet was the golden spike in the engineering, as this addresses the air issue by filling more of the case with lead.

Choosing The Rifles

So I was just about ready to hit the range when I realized that I needed a second gun to accompany my Henry H009, as I always like to have a second piece of equipment to test for function and velocity. So, I reached out to my friend and fellow instructor Sean Krecko, and he was kind enough to loan me his 1956 Winchester Model 94. Normally, I don't like to guinea pig a friend's rifle, but the inherent low pressure of subsonic ammunition puts minimal stress on the firearm. With these two rifles, I gathered up a Caldwell Benchrest Competition front rest, a Champion V-bag rear rest, some Clear Ballistics 10-percent FBI gelatin and a Shooting Chrony chronograph for what looked to be a slam dunk of a range day.

Range conditions were ridiculously warm for January in New York. The ambient temperature was 62 degrees Fahrenheit with a 10 mph crosswind on the 100-yard range. Many folks squawk at shooting subsonic ammunition in the wind, but if you crunch the numbers, you'll see that even at 200 yards, you would only gain one measly inch of deflection in these conditions.

I settled in with the intent of doing all of my accuracy testing with the Henry H009, as it was topped with a 3-9x Nikon Prostaff optic. I skipped doing the same with the old Winchester 94 because it has already seen a ton of rounds, and without a scope, it wouldn't really be a fair comparison. However, both would be used to gather velocity data and test functionality, as each had a different magazine system.

1) While the author couldn't recover the bullets, Hornady was gracious enough to share some of theirs. 2) The specialized powder ensures consistent ignition, adding to the overall accuracy of the new round. 3) The clear Ballistics gel block was a twisted mess after getting struck with three different Sub-X bullets from a distance of 100 yards.

The Results

Once I finalized my shooting position, I loaded up the Henry and fired a round into the dirt to observe the point of impact. As expected, I needed to come up quite a bit from my supersonic ammunition zero—22.5 inches, to be exact. As I finalized my zero, I felt a moment of great appreciation for the pleasant byproduct of subsonic ammunition: reduced recoil.

Once I punched out the center of my scrap paper, it was time to get some numbers together. Starting with velocity, the rounds fired from the Henry reached an average of 1,016 fps with a standard deviation of 51.5 fps. While this is a high spread, it didn't seem to be a major player in the accuracy game, as I was still able to obtain an average group size of 1.99



inches, plenty small for even a neck shot on a whitetail. Consistency was incredible, as the smallest group wasn't too far outside of the average at 1.93 inches. I'm glad to publish another evaluation proving that standard deviation isn't everything, as this particular test had horrible numbers, but accuracy was better than nearly any supersonic round I've run through the Henry. With groups this small from a lever-action carbine, I'd love to know what magic Hornady utilized to stabilize such a heavy bullet at low speed.

Testing with the Winchester raised an eyebrow as it reached a velocity average of 1,119 fps with a standard deviation of only 8.9 fps. One wouldn't expect such a difference between two guns with the same barrel length, but this isn't the first time that I've observed this phenomenon. This is why I urge everyone plugging numbers into a ballistics calculator to never "believe the box." These numbers only represent the manufacturer's test parameters, which are almost guaranteed to be different than your own.

As this rifle produced the most energy, I chose it to test that the bullets stayed put under recoil. This is always a concern in tubular magazines, particularly with new ammunition. Using a Vernier caliper, I confirmed that the overall length of the final round did not change after being subjected to the recoil of the rounds before it. It looks like Hornady made use



of the increased bullet shank and a cannelure in lieu of simply laying down the crimp hammer. Many manufacturers go this route because it's simple, but excessive crimp is going to deform the bullet and hurt your accuracy.

Next came the fun part: shooting ballistic gelatin. I placed two Clear Ballistics 10-percent FBI gel blocks 100 yards downrange and fired a single shot at 32 total inches of gel. As luck would have it, the bullet penetrated the first block and bounced off of the second block, never to be seen again. With the last block in hand, I decided to shroud it in a plastic 55-gallon drum that was cut open on one side. Unfortunately, this wasn't enough to catch the bullet, either, as I observed a jagged keyhole-shaped exit wound in the back of the barrel. Judging by the shape, expansion definitely took place,

Accuracy like this was the norm when fired out of my Henry H009.

and if it still has that kind of energy after going through the gel, there is absolutely no concern that it wouldn't be lethal. Being that I wasn't going to recover any bullets that day, I decided to send two more into the same block and observe exactly where expansion initiated. Inside the gel, we saw expansion at 8, 10 and 12 inches, causing spiral wound channels in every shot.

Parting Shots

As I put it all together, it's fair to say that Hornady has succeeded in its mission of quieting down grandpa's old hunting rifle. I found terrific accuracy and expansion within traditional .30-30 distances. Cycling was also smooth in both styles of tubular magazines that the round is commonly fed through. This round is going to be a favorite to those looking to introduce a new shooter to centerfire ammunition as well as the sportsman who doesn't want to scare off secondary targets. For more information, visit hornady.com. ★



This illustration shows the tapered jacket, hollow cavity and Flex Tip that work together to create low-velocity expansion.

PROTECTOR & PROVIDER

Henry's versatile .410 shotgun reports for field and survival duties

BY CLINT THOMPSON



There are basically three types of survival situations. The first is short-term, wherein you're forced to take immediate action to survive a non-reoccurring incident, such as defending against a home invasion. The second is medium-term, wherein you're forced to engage in survival actions for a few days or weeks, such as during the loss of power or civil authority. The third is long-term, wherein you're forced to survive for a period of months or years. For any of these, you'll need a versatile firearm and a good, heavy-duty blade.

Survival Gun Anatomy

Depending on an individual's location and circumstances, the tools necessary for survival may vary. As a firearm example, a small .380 semi-auto pistol for defending the home or carrying on the move would not be my choice. On the other end of the spectrum, a .50-caliber semi-auto beast of a rifle would not be my choice, either. Then what does suit these circumstances?

I'd recommend a firearm that you can acquire ammo for, that's easily carried and that can be used for both defense and taking game. A shotgun, while having many pros and cons, is a good defensive and offensive firearm. Most people, as I do, like the 12 and 20 gauge for this purpose, but I've found an alternative shotgun that takes shells that can also be used in revolvers and even in a derringer.

Henry Repeating Arms is well-known around the world. The company's president and owner, Anthony Imperato, has taken the basic Henry design and created an amazing line of shoulder-fired guns. One worthy of note is the Henry .410 lever-action shotgun that shoots 2½-inch shells. This design is offered in two models: the H018-410, which sports a 24-inch barrel, and the H018-410R, which has a 19.75-inch barrel with rifle sights. My pick is the H018-410R for its shorter barrel and rifle sights.

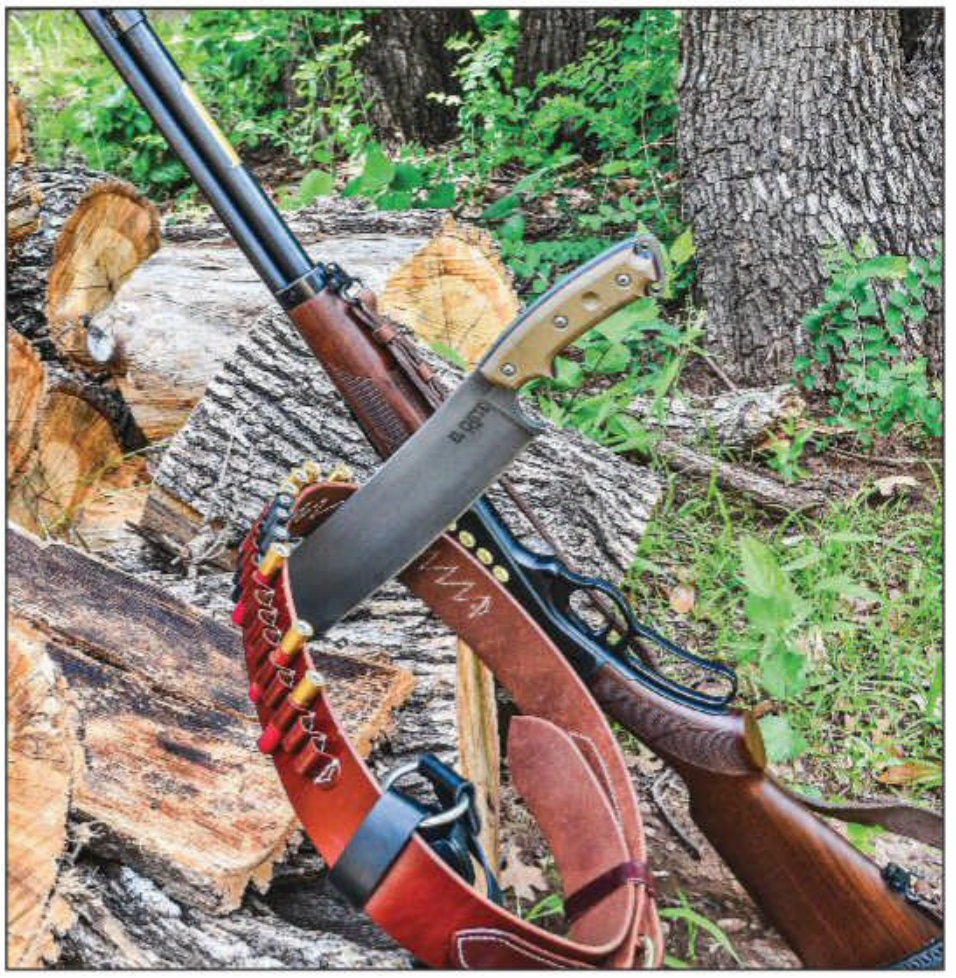


Offered in two models, Henry's lever-action .410s can be extremely versatile guns in a number of survival situations.

There are a couple of excellent reasons that I chose the .410 for my shoulder-fired survival weapon. I like the fact that I can fire the same 2½-inch .410 shell in the Henry lever action as I can in my S&W Governor and Bond Arms derringer. This is reminiscent of the 1873-to-1894-era lever-action rifles, which could fire a round interchangeable with a handgun. One ammunition type for two or more weapons—for a survival tool, this is a very good thing.

Another reason I like the .410 shotgun round is that when crap hits the fan, the ammo stores will be swamped, and the shelves will be cleaned. Remember when you could hardly find .22 ammo? The run on that ammunition type lasted the better part of two years. I believe that during and after a run on the stores, .410 ammo will be more available than the 12 or 20 gauge.

Now I have a Henry .410 lever-action shotgun with rifle sights, and I can use slugs to take down deer and other medium-sized game; for small game, I can use the #4 shot. If called upon, I can also take down bipedal animals up to 50 yards with the "000 buck." For all these purposes, I can use my Henry, and for closer ranges, the Governor revolver and Bond Arms derringer. In my professional opinion, this is a good match—a match I will be staking my life on in the future.



With a quality blade and a handgun in the same chambering, the Henry augments a good survival arsenal.

More Henry .410 Pros

Continuing to make its own case for superlative survival firearm, the Henry lever-action .410 shotgun has little recoil. This means that adolescents can handle this weapon if called upon to do so, and ladies of smaller stature won't be intimidated by the Henry's recoil, either. If people are comfortable with the firearm, they will use it and, better yet, will train in its use.

> **"If you encounter a hostile bipedal, you'll be able to cure their hostility with a dose of 000 buck."**

The cycling of the Henry .410 lever action is easy and smooth for the smallest of adults. The .410-gauge shells have a blunt end but still cycle easily in this amazing firearm. After running over 250 shells through this Henry shotgun, I had zero—zero—problems. The Federal .410 shotgun shells performed as one would expect. The copper-coated 000 buck gave fantastic groupings at 25 yards. In fact, the Federal Premium copper-coated 000 buck performed better than any other 000 buck I've tested over the last six months.

Henry's various lever-action rifles and shotguns are loaded in the breach end of the magazine. You simply twist and remove the inner magazine tube until you expose the shell opening, then you insert your .410 2½-inch shells and push the inner magazine tube down, twisting to lock it in place. The Henry .410 shotgun has a six-round capacity.

Hunting & Defense

When survival actions against intruders are necessary, whether in your home or on your property, you can legally stop their threatening actions. Say you shoot an intruder while he forces himself through your front door, and then the suspect turns and runs down the street. You should not pursue him to finish the job. Unless you can prove to the authorities

SPECIFICATIONS

HENRY LEVER-ACTION .410 SHOTGUN

- **Gauge:** .410 • **Barrel:** 19.75 inches • **OA Length:** 38.5 inches
- **Weight:** 7.33 pounds (empty) • **Stock:** American walnut • **Action:** Lever
- **Sights:** Brass-bead front; fully adjustable semi-buckhorn with diamond insert rear
- **Finish:** Blued Steel • **Capacity:** 5+1 • **MSRP:** $922





and the district attorney that the suspect was an imminent threat to others, it's best to let him go. But if you shoot him in the chest with the 000 buck as he forces his way into your home, he won't go far.

For surviving for an extended period while in the inner city or urban areas, it's best to have plenty of food and water on hand. I suggest at least three months' worth. If you eventually run out of food, you'll have to go out and find more. You can take the Henry .410 lever action and hunt for animals that live in urban areas, such as squirrels, opossums, skunks, rabbits, cats and dogs. You can also shoot pigeons or other birds that frequent your property. The .410 is safer to shoot around other occupied homes than the larger shotguns.

If you live or are surviving in a less-populated area, the Henry lever-action .410 shotgun can be used to take game such as deer, wild hogs, rabbits, squirrels and game birds. If you're foraging for game birds and come upon a deer, you can switch to a .410 slug to add the bigger game to your menu. If you encounter a hostile bipedal, you'll be able to cure their hostility with a dose of 000 buck. I grew up in rural Kansas and started hunting at the age of 10; I started trapping at the age of 12. From these early experiences and lifelong LEO experiences on three continents, I can confidently say that the Henry .410 lever-action shotgun is all you need to survive.







Despite the shells' blunt ends, the lever-action Henry .410 cycled them perfectly during testing. Patterning with Federal Performance's copper-coated 000 buckshot yielded excellent performance at multiple distances.

Last Blasts

Just to reiterate, as far as testing the Henry H018-410R lever-action .410 shotgun, I found that there was no single incident of failure at the end of shooting 250 shells. This is an excellent made-in-the-USA firearm. With the rifle sights, this firearm is versatile beyond shooting game birds. The groupings of the birdshot and 000 buckshot were excellent. When I go backpacking or RV camping, my Henry lever action will be with me.

This shotgun complements my S&W six-shot Governor and two-shot Bond Arms derringer. I love the versatility and the fact that I can carry my hand-cannon Governor and the Henry at the same time with one common ammunition type. I highly recommend the Henry lever-action .410 model H018-410R for your complement of survival tools. For more information, visit henryusa.com. ★

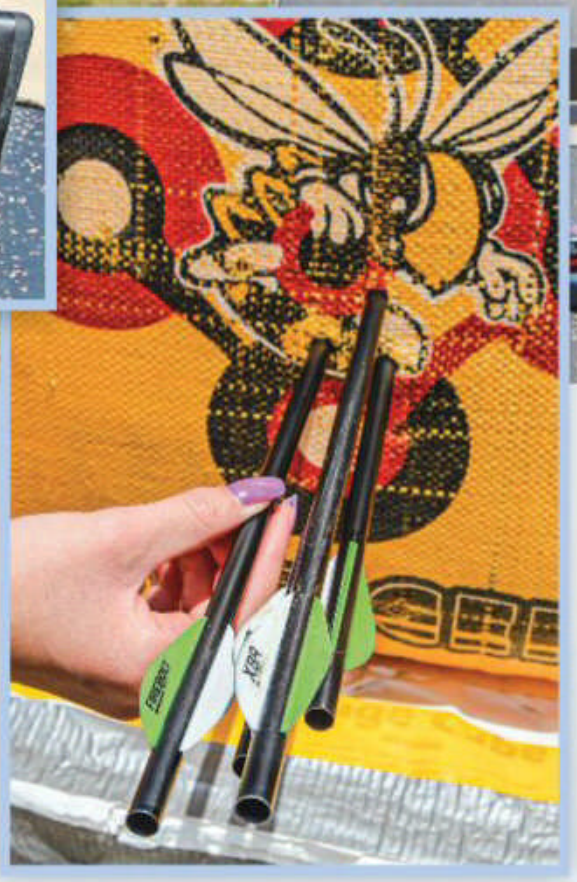
MULTI-PLATFORM

2-IN-1 CRACKSHOT

Meet Traditions' new standout arrow- and .22-firing rifle

BY GORDON D. SMITH





At the 2020 SHOT Show, an interesting development occurred with the introduction of multiple arrow-firing rifles to the marketplace. Some launched full-sized arrows, while others utilized familiar crossbow-sized bolts. The majority were pre-charged pneumatic airguns using high-pressure air (HPA) to send their payload, and all worked by directing their thrust immediately behind the arrowhead as opposed to pushing the arrow from the back end. This method helps to eliminate something called the "archer's paradox," where a traditionally launched arrow pushed from the rear causes the shaft to bend and flex as the mass of the arrow resists that push. With the launching forces being concentrated behind the tip of the arrow or bolt, it is effectively pulled off the launch tube/inner barrel and stabilizes immediately.

One model stood out from the pack because it was from Traditions Performance Firearms, the folks out of Old Saybrook, Connecticut, who import/produce all those great blackpowder guns and replica Old West centerfire arms. Traditions' patented version of an arrow-firing rifle took on the guise of the company's single-shot, break-barrel .22 Crackshot rifle with an interchangeable barrel/upper to fire bolts. Thus was born the Crackshot XBR.

The .22 firing module is made in Spain by Ardesa and has a stout 16.5-inch barrel. When combined with the polymer stock section, the unit only weighs slightly more than 4 pounds and is 32 inches long. Removing the sling stud under the forearm allows the forearm to come off and the .22 barrel to be separated from the stock/receiver. Replace it using the U.S.-made, 20-inch XBR upper with its longer forearm and hex-head screw, and you now have a powerful, compact hunting arm in a package weighing under 6 pounds and just over 3 feet long.

True to its heritage, Traditions chose to utilize the power of a powder-actuated cartridge to launch the payload. Using a proprietary .27-Caliber Long blank that is placed into the chamber, a crossbow-sized bolt specially made for use with the XBR,



(Above) About to launch a Firebolt with the XBR. **(Far left)** Both barrels come with the Crackshot XBR package. Only one scope is included, and it comes pre-mounted to the bolt-firing barrel. **(Left)** Four Firebolts made this very tight group at 25 yards from a rest.

called the "Firebolt," is slid over the inner barrel with the vanes being surrounded by an outer aluminum shroud. The Firebolt is a 16-inch 2216 aluminum arrow weighing 238 grains. For my testing, I installed 100-grain target tips, which can quickly be swapped for 100-grain broadheads for hunting applications. Traditions cautions against trying to fire other arrows/bolts from the Crackshot XBR as the pressures involved could cause a catastrophic failure and result in injury to the shooter or bystanders.

Once the bolt is completely seated over the inner barrel, the Crackshot XBR action can be broken open by pulling on the barrel catch release at the front of the triggerguard. Then insert an XBR Powerload. Care should be exercised to completely seat the Powerload up against the extractor and close the action without crushing the rim, which could detonate it. Next, take the trigger-blocking crossbolt safety off as the hammer cannot be cocked with the safety engaged. Due to the length of the pre-mounted scope, a hammer spur is attached to the hammer for ease of cocking. Once cocked, the safety can be reengaged if not ready to fire. There are two other safety features built into the Crackshot XBR system: a transfer bar to prevent the hammer from contacting the firing pin if the trigger is not pulled, and the action is blocked from opening if the hammer is cocked back. It can easily be de-cocked and unloaded without firing, making it especially safe for tree stand use.

On the Firing Line

I chose to concentrate on the arrow-firing capabilities of the XBR and forego plinking with the .22 barrel. I have no doubts it would provide excellent performance at typical .22 hunting ranges as it is a substantial single-shot barrel with a rifling twist rate of 1-in-16-inches, able to handle shorts, longs and long rifle ammunition. When broken down from the 13.75-inch length-of-pull stock it would make a great backpacking gun as well as an excellent training rifle for youngsters.

Traditions rates the XBR as capable of launching the bolts up to 385 fps. My work with it at over a mile above sea level yielded an average of 352 fps. Even though slightly slower than advertised, the effective kinetic energy at 30 yards was still over 93 foot-pounds.

The supplied Traditions 4x32 scope came already attached to the integral Weaver-style scope rail and sighted for 30 yards. Its duplex reticle compares to BDC types that may be found on modern crossbows having three stadia lines below the

crosshairs allowing the shooter to determine holdover at various distances. The scope provided a clear sight picture and is a perfectly adequate setup for the XBR. It definitely aided in producing tight groups at distances out to 50 yards. A set of scope lens covers is included as well.

Pull weight on the single-stage, non-adjustable trigger averaged 7 pounds 8.5 ounces on my test gun. While heavy, that might lighten up a bit with more break-in and it wasn't detrimental to accuracy when launching the Firebolts. It might require a bit of practice to obtain the best accuracy when shooting the .22 barrel.

Fired at 25, 30 and 50 yards, the accuracy was impressive. I did not experience any "Robin Hood" shots—a good thing as the bolts run about $8 each—but I came very close. Know that when the inner barrel becomes dirty it will cause the bolts to drop several inches below point of aim. As rimfire cartridges are generally known to be notoriously dirty, it is necessary to unscrew the outer barrel/shroud and give it a couple of quick swipes with a bore cleaner and another with gun oil so the bolts don't experience extra drag. On one occasion, this condition caused me to send a couple of bolts through the 2x2-inch wooden target frame. Still, the penetration was impressive at 50 yards!







(Top) Loading the Firebolt into the XBR. (Bottom left) Proprietary blank cartridges for launching the bolts. (Below right) After shooting a Firebolt, an extractor makes removal of the spent blank very easy.

Neither Fish Nor Fowl

While arrow-firing guns might not turn the crank of hardcore bowhunters, this innovation might have a place among gun hunters that prefer a backpack size solution and for those who might not want to invest in crossbows or the learning curve and practice associated with traditional archery. It is a great option for those with physical challenges.

If planning to take the Crackshot XBR hunting, keep in mind that Traditions rates its effective hunting range at approximately 70 yards. As far as its legality for hunting in the United States, Traditions is working with state governments on that. As governments are wont to do, none have confirmed nor restricted the XBR specifically at this time. Technically a rifle utilizing a metallic cartridge (blank) to shoot bolts, it blurs the lines, and each state might offer a different determination if/when it is allowed and whether it will be treated as a rifle, crossbow or usable during archery season. Special seasons for youth and disabled persons could have an impact on the decision as well. It will be the hunter's responsibility to confirm with his or her respective state wildlife agency. Have their answer in writing with you when hunting with the XBR. The possible exceptions would be states that allow taking predators or invasive species by any means.

The Crackshot XBR came well packaged with a comprehensive owner's manual that is divided into sections on the Crackshot and the Crackshot XBR. The manual covered all aspects of safe use, swapping of uppers and cleaning/storage, and is packed with both black & white and color photos. The pamphlet included for the scope left something to be desired, though.

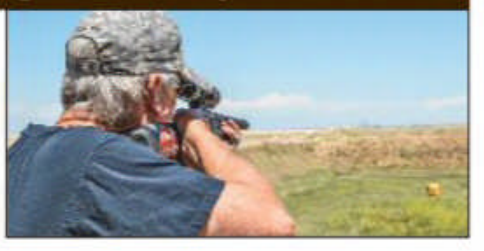
Three proprietary Traditions Firebolts are also included, as were the proper Allen wrenches for attaching the forearm of the XBR upper and adjusting the supplied Traditions 4x32 scope. An additional accessory available from Traditions is a quick-detach, side-mount quiver that holds six Firebolts. The proprietary Traditions XBR Powerloads come in packs of 100 for $24.95. Only available from Traditions or its retailers, you won't necessarily be putting as many bolts downrange as you would .22s, so a box or two of the loads will probably last the shooter a good while.

The Crackshot XBR package in the all-black, synthetic-stocked version retails for $499. It is also available in two camo versions as well: Kryptek Highlander Reduced or Realtree Edge, at an MSRP of $579. Traditions offers a limited lifetime warranty with all of its products. For more information, visit traditionsfirearms.com. ★

SPECIFICATIONS

TRADITIONAS CRACKSHOT XBR

- **Caliber:** .27 Long • **Barrel:** 20 inches
- **OA Length:** 36.5 inches • **Weight:** 6 pounds
- **Stock:** Synthetic, Realtree and Kryptek camo available
- **Finish:** Black • **Optic:** Traditions 4x32 • **MSRP:** $499



You're a sitting duck



in a gun-free zone

Public safety is a critical part of the education campaigns of the Second Amendment Foundation, and with good reason. Without a self-defense option, we are all at greater risk.

The facts support our concerns about gun-free zones. The Crime Prevention Research Center (CPRC) recently finished updating a list of mass public shootings worldwide.



FACT: Over the course of 18 years, 1998 to 2015, the CPRC found 2,354 attacks and at least 4,880 shooters outside the U.S. and 53 attacks and 57 shooters within this country. The study found the U.S. makes up 1.49 percent of the murders worldwide, 2.20 percent of the attacks, and less than 1.15 percent of the mass public shooters.

FACT: Most gunmen are smart enough to know that they can kill more people if they attack places where victims can't defend themselves; 98 percent of mass public shootings since 1950 have occurred in places where citizens are banned from having guns. In Europe, every mass public shooting in history has occurred in a gun-free zone. And Europe is no stranger to mass public shootings. In the past eight years, it has experienced a per-capita casualty rate 50 percent higher than that of the U.S.

FACT: The U.S. is a relatively safe place from these shooting attacks precisely because so many attacks are thwarted by legally armed good Samaritans.

FACT: The evidence shows that gun-free zones are not the answer. Truth is, they are an added danger because they prevent legally armed citizens from defending themselves and their neighbors. It's time to get rid of gun-free zones. The U.S. has tried them for more than 20 years and evidence shows that gun-free zones actually increase the danger. Nobody wants to be a sitting duck in a maniac's shooting gallery.

The Second Amendment Foundation

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www.saf.org

DIY TRUCK RAMP

Need a lift? Just ramp, rope and ratchet it up

BY MARK HERWIG

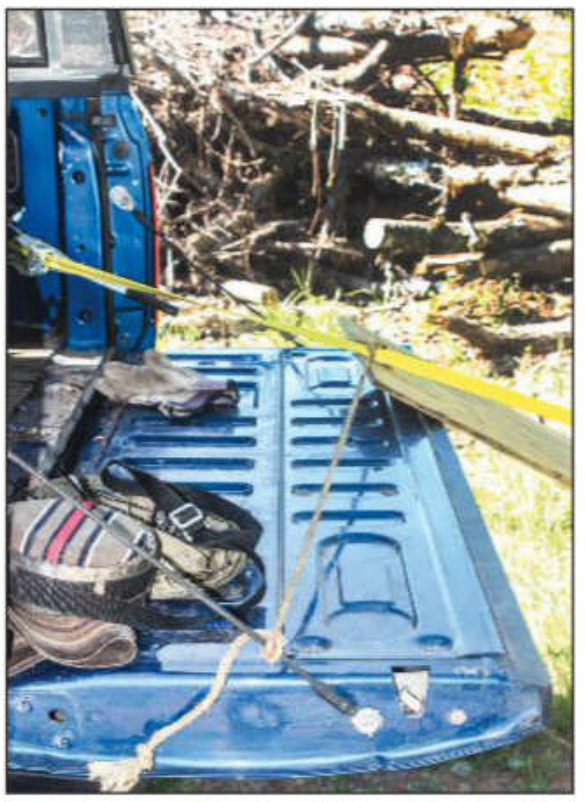
One of the things I admire most about our frontier forefathers and mothers is they met the many challenges life threw at them with little more than a few tools, what nature provided and a fierce determination and inventiveness.

Loading dead deer, logs and the odd landscaping boulder can be back-breaking, and the lift into the bed of my Ford F150 truck is 3 feet. At 65, my back isn't what it used to be. I'm not complaining, mind you, as I had my youth and a lot of fun getting this beat up.

(Allow me this one boast: On my first deer hunt in the mountains of Colorado at age 33, I lifted an un-gutted, 3x3 mule deer buck over a five-strand barbed wire fence and again into my waiting truck.)

Ramp, Rope and Ratchet to the Rescue

I don't know if anyone sells the kind of loading system I wanted. Heck, I didn't even look. Like my forefathers, I first looked to myself for a solution. Besides, it



is too much fun and so satisfying to find your own, homegrown solution to challenges instead of just surfing the web and deploying the credit card. Boring.

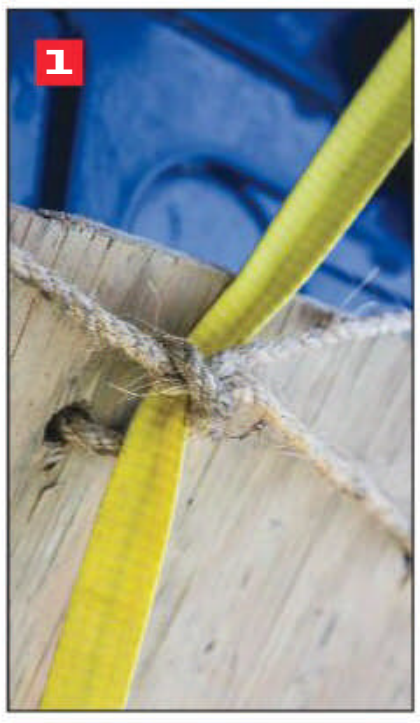
This all started when I wanted to load a large log from my hunting land near Duluth, Minnesota, (and later a deer if I got one) but was going to be alone, without help. Besides, I shouldn't even be helping load such a heavy item.

Driving home from camp, when I do my best problem solving, I thought, "I could roll it up a ramp!"

Back home, I headed to my personal "hardware store," my over-stuffed garage, that is, for the materials. Since any plywood ramp would have to be able to hold some weight without bowing, I would need some pretty stiff stock. The thin stuff won't do here, but 0.5-inch will.

I next measured the inside length of my truck bed, minus an inch or two so I could close the tailgate, which came to 78 inches. I wanted the ramp as long as possible since the lower the angle, the easier to ratchet up a heavy load.

I kept the ramp fairly narrow, 18 inches, but wide enough to take most items. A narrower ramp is also easier to drag out from beneath all the other stuff I have in my truck. But, how to hold the ramp in place while being used?









1) Run the hauling strap through the ramp rope to help keep the load from falling off. 2) To pull the strap out, push the ratchet spring up and then hold the strap catch up. 3) If needed, use a carabiner to attach the ratchet to the truck load anchor. 4) This log is ready to crank in.



Another simple solution: a stout rope!

I drilled two holes near the end of the ramp, but far enough in to be stout against the tension of loading. I then ran a rope through each hole, leaving enough to tie the ends onto the two tailgate cables. Ramp secure.

A Power Source?

Next up, I needed a power source to get a load into the truck, or at least close enough I could push it in the last little way. Of course, the power source is my arm, but the leverage is a ratchet tie-down with a 2,000-pound pull capacity. I've seen handles on lesser, cheaper ratchets buckle under heavy loads, so I got a heavy-duty ratchet that can do the job.

A good ratchet is powerful, the straps are sturdy and the mechanism works well. Just remember, you have to pop the spring up or down depending on whether you're loading or feeding out the strap. Also, to pull out the strap you have to hold the brake up. I usually forget this between uses and have to re-learn the whole process.

The next challenge was finding a way to hook the ratchet's locking "J" hook to the truck bed. The truck's cargo tie-downs are heavy duty, but the stubby ratchet clip was too fat to fit onto the tie-downs. So, on to easy/cheap solution #3: I bought a big carabiner—one of those handy rope jigs climbers use. It works perfect to connect the ratchet to the truck tie-down.

For shorter loads, I hook the ratchet on a tie-down near the tailgate so I can stand comfortably on the ground while cranking it in. For longer loads, like a deer, you have to hook the ratchet onto a tie-down toward the front of the truck bed and crank away on your knees.

Well, that's it. The ramp-rope-ratchet system works great for loading heavy items. My DYI ancestors would be proud! Give it a try if you feel like sparing your threadbare back or saving it for down the road. ★



LOADING AND SAFETY TIPS

- ✔ **Roaps can slip so tie logs around the middle (unless there's a knob to keep the strap in place).**
- ✔ **When parked on an uneven or sloped surface, shift the ramp to accommodate the angle to ensure the load stays put on the ramp.**
- ✔ **Just leave the ramp and ratchet in your truck. If you're like me, you never know when an opportunity to grab some free wood off the curb might arise, you run across a rummage sale or find some other hard-to-load free item left on the roadside.**
- ✔ **With any mechanical gear, be sure not to exceed limits and tolerances for your safety and the sake of the equipment.**
- ✔ **Watch your fingers and toes closely when moving heavy loads that can crush or break both. —*Mark Herwig***

LET'S BOWL!



An easy and fun guide to carving your own rustic bowl

BY MARK HERWIG

Our ancestors were nomads who hunted, gathered, fought and ate on the move. Their lives were portable. Today, many of us carry on that great American tradition in our varied, individual ways.

One important item to a mobile outdoor lifestyle is the food bowl. Then, as now, there's nothing more practical to eat from when on the move than a wood bowl. They are portable, lightweight and can hold any food or drink. Native peoples made bowls from clay or hollowed out gourds. Others used fire to hollow out rock-hard burls, and some survive to this day. I decided on a wood bowl because I love anything made from wood. I love the look, grain, colors, smell and feel of wood. I like natural materials because they provide a balance to today's cheap, mass-produced throwaways.

The Process

I chose a butternut log from a neighbor's tree that he let me cut because it was dying. It is softer than many other woods and has a beautiful grain in many shades of earthy browns. After cutting the log, which is about 10 inches in circumference, I waxed the ends so the wood dried slowly and didn't crack.

Next, I cut a piece about 10 inches long with a chainsaw. Then I marked an edge with a pencil and started carving out the center. I used a 2-inch King Arthur mini-angle grinder with a chainsaw head. I anchored the log to a wood sawhorse, holding it tight with 2x4 chunks screwed into the horse. Long nails held the sides in. It was crude, but effective.

As I cut down, a rot hole showed itself. Once the bowl was dug deep enough, I mixed some of the wood chips with wood glue and packed it tight.

To shape the sides and bottom, I fastened the block tight to a woodwork bench with wood clamps. Grinding sideways into the grain goes faster than straight into the grain. Rotate the bowl to access all sides. Use a light touch with the grinder to smooth out the cut grooves for the next step, sanding.

I left the bowl clamped and used a King Arthur sanding/polishing motor with a flexible shaft and spinning head. I pushed hard at first to smooth the deeper grooves, but then a light touch provided a smooth surface.

I previously made several bowls using hand tools such as chisels and mallet, scorp, several size adze and a draw knife. This, of course, is a slower and more physical process than using expensive power tools.

Hand tools offer different options. On a birch ruffed grouse effigy bowl (photo 15), I rough cut the bottom to simulate feathers.

Neither power tools nor hand tools make a quick, easy process, but that's the fun of it. There's nothing like working a piece of heretofore "firewood" into a useful and beautiful object that will outlast the maker. ★

BOWL-MAKING TIPS

FINISHES: There are a variety of food-safe wood finishes with different properties and looks, including raw linseed oil, walnut oil, tung oil, butcher block oil/mineral oil, beeswax and shellac. I used amber tinted shellac. It is a food safe (once dry) wood stain made from a resin secreted from the female lac bug with various carrying agents that evaporate. I've never used shellac before. I liked how it brought out the rich wood grain without obscuring it. I lightly sanded with emery paper after the first coat, then applied two more coats. The bowl is smooth, rich looking and protected.

TOOL TIME: The 2-inch angle grinder worked well, but I thought a 4-inch grinder would be faster, so I bought one for $130. This is a very powerful tool. In fact, it's much too powerful and much harder to control than a 2-inch grinder for this job.

You can also buy a lathe and cutting tools, but that setup is more expensive and takes up a lot more room in your work shed. Lathe work also has that too-perfect, manufactured look.

One way to more quickly remove wood when using hand tools is to first pattern drill with a large bit. Then chip out the rest with chisels, etc.

CUSTOMIZING: Frontier adventurers often attached their meager possessions to packs, saddles or even their persons with leather thongs. To do so, simply drill a hole in your bowl and thread a leather string through it.

Other embellishments might include putting on metal buttons or carving effigies to invoke a special animal or plant. One idea I had was to carve a beaver—an iconic animal to our trapper ancestors—inside a bowl in light relief and then cutting a beaver tail to serve as a handle. Native people often included animal effigies in their wood and clay utensils, bowls and other items. They give the bowl a unique, individual look and meaning.

MORE WOOD WISDOM: Bass or linden wood is a popular sculpting wood. It is softer than butternut, but has the appearance of toilet paper, practically colorless and without grain. I have also carved bowls using birch from my hunting land near Lake Superior. It is harder than butternut, but beautiful and the scraps burn with the sweet aroma of the north woods! I also lined one bowl with birch bark, an equally beautiful north woods resource.

One way to more quickly remove wood when using hand tools is to first pattern drill with a large bit. Then chip out the rest with chisels, etc. —*Mark Herwig*


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14

1-2) Cut the log and mark the bowl outline. 3-6) Use a mini grinder or a hammer and chisels to remove wood from the inside of the bowl. 7-9) Glue and sawdust can be used to fill bad knots, then sand the inside with a sander. 10-12) With the bowl clamped to the workbench, shape the sides and bottom of the wood bowl. 13-14) More sanding and a few layers of shellac finish the job. 15) Hand tools were used to create feathers and detail on this birch grouse effigy bowl.


15



BIG CAT TALES

Read on if you want to come out on top in mountain lion country

BY GREGORY MCNAMEE

Something strange happens to people when big cats are stalking them. Seldom can the cat be seen, at least at first, but the fight-or-flight impulse kicks in all the same, even as some deeply hidden part of the brain is activated to send the hairs on the back of the neck quite literally standing straight on end. Those cats are ancient hunters of humans—a fact that we know instinctively, no matter what else we think or know about them, and fear is our first reaction in their presence.

I know this from experience, having had a few close encounters with mountain lions—also called pumas, cougars and, in some parts of the country, panthers—over decades of tromping around in the wild country of the Mountain West. One such encounter happened years ago when, on a full-moon night, I was camped on the edge of a clearing and awoke to see, in the middle of that open expanse about a hundred feet away, a mountain lion and two of her young crossing. The mother stopped, sniffed the air and turned to stare straight at me for what seemed like hours. Of course, it was really just a few seconds, but it was

Courtesy Remington Art Museum

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A newly improved version of America's best-selling male performance enhancer gives 70-year-old men the bedroom performance they enjoyed in their 30's.

America's best-selling sexual performance enhancer just got a lot better.

It's the latest breakthrough for nitric oxide the molecule that makes erections possible by increasing blood flow to your penis.

Nitric oxide won the Nobel Prize in 1998. It's why "the little blue pill" works. More than 200,000 studies confirm it's the key to superior sexual performance.

And this new discovery increases nitric oxide availability resulting in even quicker, stronger and longer-lasting erections.

One double-blind, placebo-controlled study (the "gold-standard" of research) involved a group of 70-year-old-men.

They didn't exercise. They didn't eat healthy. And researchers reported their "nitric oxide availability was almost totally compromised," resulting in blood flow less than HALF of a man in peak sexual health.

But only five minutes after the first dose their blood flow increased 275%, back to levels of a perfectly healthy 31-year-old man! "It's amazing," remarks nitric oxide expert Dr. Al Sears. "That's like giving 70-year-old men the sexual power of 30-year-olds."

WHY SO MUCH EXCITEMENT?

Despite the billions men spend annually on older nitric oxide therapies, there's one well-known problem with them.

They don't always work.

A very distinguished and awarded doctor practicing at a prestigious Massachusetts hospital who has studied Nitric Oxide for over 43 years states a "deficiency of bioactive nitric oxide… leads to impaired endothelium-dependent vasorelaxation."

In plain English, these older products may increase levels of nitric oxide. But that's only half the battle. If it's not bioactively available then your body can't absorb it to produce an erection.

Experts simply call it the nitric oxide "glitch." And until now, there's never been a solution.

NEXT GENERATION NITRIC OXIDE FORMULA FLYING OFF SHELVES

Upon further research, America's No. 1 men's health expert Dr. Al Sears discovered certain nutrients fix this "glitch" resulting in 275% better blood flow.

He's combined those nutrients with proven nitric oxide boosters in a new formula called *Primal Max Red*. In clinical trials, 5,000 mg is required for satisfying sexual performance. *Primal Max Red* contains a bigger, 9,000 mg per serving dose. It's become so popular, he's having trouble keeping it in stock.

Dr. Sears is the author of more than 500 scientific papers. Thousands of people listened to him speak at the recent Palm Beach Health & Wellness Festival featuring Dr. Oz. NFL Hall of Fame quarterback Joe Namath recently visited his clinic, the **Sears Institute for Anti-Aging Medicine.**

Primal Max Red has only been available for a few months but everyone who takes it reports a big difference. *"I have the energy to have sex three times in one day, WOW! That has not happened in years. Oh, by the way I am 62,"* says Jonathan K. from Birmingham, AL.

HOW IT WORKS

Loss of erection power starts with your blood vessels. Specifically, the inside layer called the endothelium where nitric oxide is made.

The problem is various factors THICKEN your blood vessels as you age. This blocks availability causing the nitric oxide "glitch." The result is difficulty in getting and sustaining a healthy erection.

How bad is the problem?

Researcher shows the typical 40-year-old man absorbs 50% less nitric oxide. At 50, that drops to 25%. And once you pass 60 just a measly 15% gets through.

To make matters worse, nitric oxide levels start declining in your 30's. And by 70, nitric oxide production is down an alarming 75%.

Primal Max Red is the first formula to tackle both problems. Combining powerful nitric oxide boosters and a proven delivery mechanism that defeats the nitric oxide "glitch" resulting in 275% better blood flow and stronger erections. There's not enough space here to fully explain how it works, so Dr. Sears will send anyone who orders *Primal Max Red* a free special report that explains everything.

MORE CLINICAL RESULTS

Nutrients in *Primal Max Red* have logged impressive results.

In a *Journal of Applied Physiology* study, one resulted in a 30 times MORE nitric oxide. And these increased levels lasted up to 12 hours.

"I measured my nitric oxide levels, you can buy a test kit from Amazon," reports 48-year-old Jeff O. "Monday night I showed depleted."

Then he used ingredients in *Primal Max Red* and, "The results were off the charts. I first woke around 3 a.m. on Tuesday with a throbbing boner. My nitric oxide levels measured at the top end of the range."



A new discovery that increases nitric oxide availability was recently proven in a clinical trial to boost blood flow 275% resulting in even quicker, stronger and longer-lasting erections.

FREE BONUS TESTOSTERONE BOOSTER

Every order also gets Dr. Sears testosterone boosting formula *Primal Max Black* for free.

"If you want passionate 'rip your clothes off' sex you had in your younger days, you need nitric oxide to get your erection going. And testosterone for energy and drive," says Dr. Sears. "You get both with *Primal Max Red* and *Primal Max Black*."

HOW TO GET PRIMAL MAX

To secure free bottles of *Primal Max Black* and get the hot, new *Primal Max Red* formula, buyers should contact the Sears Health Hotline at 1-800-329-8803 within the next 48 hours. "It's not available in drug stores yet," says Dr. Sears. "The Hotline allows us to ship directly to the customer."

Dr. Sears feels so strongly about Primal Max, all orders are backed by a 100% money-back guarantee. "Just send me back the bottle and any unused product within 90 days from purchase date, and I'll send you all your money back," he says.

The Hotline will be open for the next 48 hours. After that, the phone number will be shut down to allow them to restock. Call 1-800-329-8803 to secure your limited supply of *Primal Max Red* and free bottles of *Primal Max Black*. You don't need a prescription, and those who call in the first 24 hours qualify for a significant discount. Use Promo Code FRT0920MAX when you call in. Lines are frequently busy, but all calls will be answered.

THESE STATEMENTS HAVE NOT BEEN EVALUATED BY THE FOOD AND DRUG ADMINISTRATION. THIS PRODUCT IS NOT INTENDED TO DIAGNOSE, TREAT, CURE OR PREVENT ANY DISEASE.
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enough for her to make her point. She then went on her way, while I stayed up the rest of the night waiting anxiously for her return, which never came.

Another confrontation, much scarier, took place just a couple of years ago while I was walking along a small perennial desert river not far from my home. I was alone on that cold, still afternoon—or so I thought, until I felt those hairs rising on the back of my neck milliseconds before I heard the snap of a twig on the ground. I turned and looked toward the opposite bank, and there, crouching behind a tangle of branches, was a cat that seemed to be at least as long as I am tall.

I calculated the odds, not really knowing what to do. Puff myself up as big as I could, as I would for a bear? Yell crazily, as I would for a feral dog? Charge? Run? In the end, I took a hybrid option: I puffed up, walked backward, yelled and, a few minutes on, hightailed it. I lived to tell the tale, but I know better now.

Mountain Lions Defined

Big cats such as mountain lions are what biologists call "opportunistic hunters," meaning that they'll take down whatever is easiest and readily available. In the case of the mountain lion, this usually means deer, but it can also mean creatures as large and seemingly indomitable as a moose.

To illustrate this point, I was once driving through a mountain roadcut in western Montana and paused as a shadow crossed high over my windshield.



Humans have hunted mountain lions for millenia, and the species remains very popular with many hunters to this day.

It was thrown by a mountain lion, one that landed on the opposite bank and went tearing across a field below the road to attack a moose that was emerging from the nearby Kootenai River. Bull elk that could total a truck in a collision have also fallen to mountain lions that are much smaller. The reason for their lethality is that, like most cats, mountain lions depend on stealth and short bursts of extraordinary speed, coupled with the power of their front legs and the swift raking action of their claws.

Mountain lions range broadly from the very tops of tall mountains to the floors of deserts and forests, but left to their own devices, they prefer the middle elevations of a mountain range or hilly area, especially at about 4,000 to 6,000 feet, and broken country that offers plenty of cover in streambeds, piles of boulders and the like. Not coincidentally, this is just the kind of country that, in the western United States, male mule deer prefer, with the result that male mule deer are the usual prey of cougars.

It's also just the kind of country that human hiking, bicycling and jogging paths cross through in the mountain states, which explains that, as usage of these amenities increases owing to growing human populations, it's so often human outdoor sports enthusiasts who run afoul of mountain lions.



Courtesy Remington Museum

Overhunting of the species led to very low populations in some areas where lions were once common.

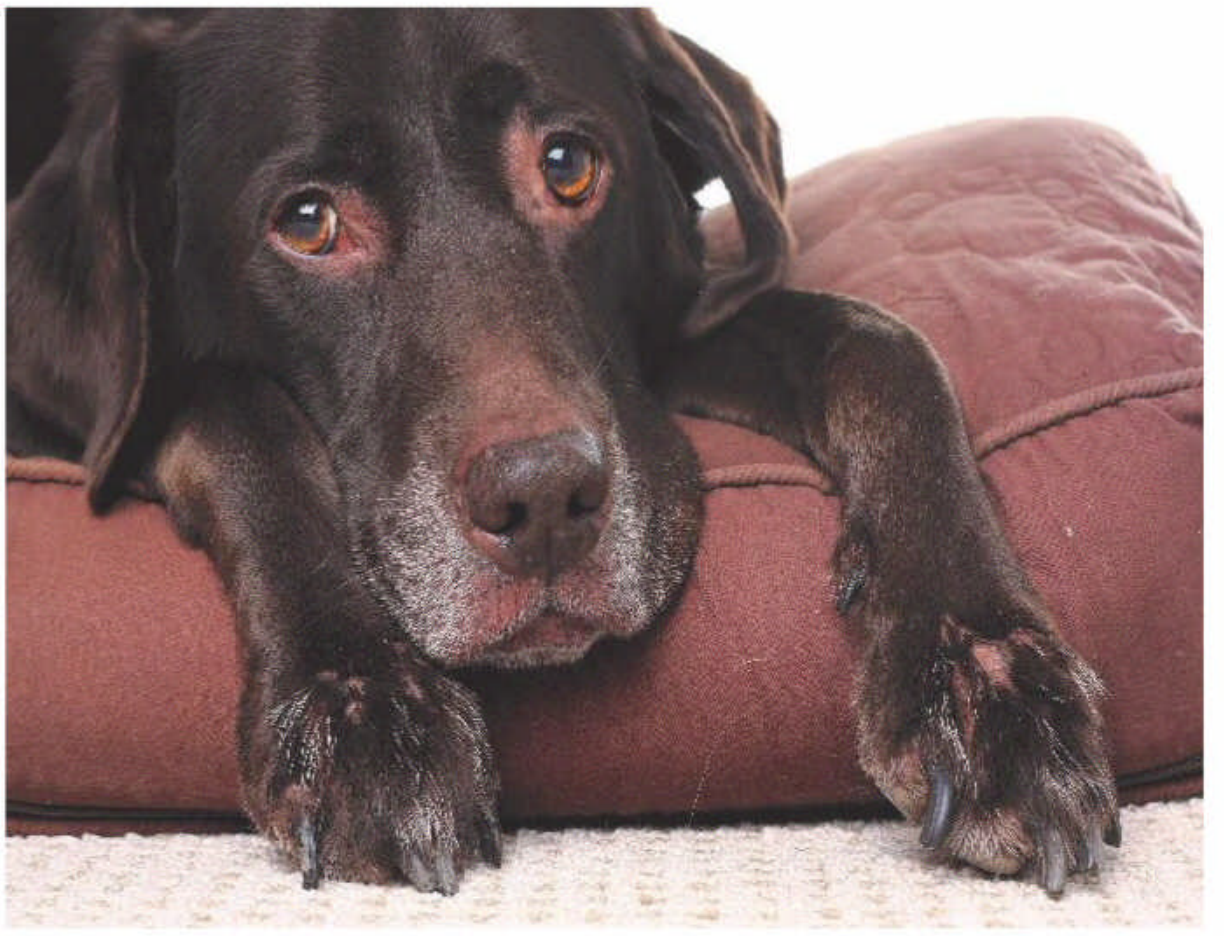
The rate of such encounters is on the rise as people settle in growing suburbs and exurbs outside of places like Los Angeles, Denver and Santa Fe. Even so, encounters are quite rare. When a mountain biker was killed near Seattle by a hungry mountain lion in May of 2018, it was the first known attack in Washington State in 94 years. There has been a total of 18 verified mountain lion attacks in all of California in the last 130 years, half of them resulting in death, and just a few in the Rocky Mountain states of New Mexico and Colorado where mountain lion populations are flourishing.

Patterning

Still, mountain lions turn up in odd places from time to time, usually for understandable reasons. Mountain lions stay with their mothers until they're about 2 years old,

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“I then made the decision to find a way to give Sammie some relief”



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Sammie has been part of my life for a dozen years. After a tough day at work I knew Sammie would be at the door waiting for me.

Now he’s older and about six months ago I noticed his difficulty in trying to get up. Sometimes he labored to simply walk. He used to spend evenings on my lap. Suddenly he stopped – He was no longer able to get up on the couch. He was suffering– I had to help!

I have a friend who had gone through the same thing with her dog– And she recommended Pettin Brand Hip & Joint. She researched many products but found that Pettin Brand Hip & Joint had 8 main ingredients that have a strong reputation for helping with hip and joint issues. Those 8 ingredients are:

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Vitamin E– Supports connective tissue health by minimizing the loss of elasticity from skin and muscles and can help delay the aging process

Vitamin C– Helps reduce cognitive aging and boosts the number of antibodies responsible for fighting toxins, bacteria and viruses, respiratory infections, kennel cough and abscesses

Chondroitin Sulfate– Attracts fluid to your dog’s joints which lubricates the dry cartilage thus facilitating the absorption of nutrients into cartilage

Organic Turmeric Root Powder– Relieves the pain and stiffness in arthritis

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- William

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Lions prefer to range in rocky terrain at about 4,000 to 6,000 feet. This track (right) is about 1.5 times the size of a human hand.

then they split off to find their own territories. "The isolation of lions from other lions for most of the year is so complete," says Arizona-based game biologist Harley Shaw, "that one wonders how they manage to get together to breed." Obviously, they do, but the big cats are fiercely territorial, and mountain lions that wander onto turf that is not their own must either fight for it or move on to other venues.

A few years ago, for instance, a 2-year-old cat wandered into a casino in Reno, Nevada, and made its way to the breakfast buffet. Fortunately, biologists from the nearby university were called, and they tranquilized and tagged the cat so that they could study its movements. What they learned from the study of the casino-crasher and other nearby cats is that in any 40-square-mile patch of potential habitat, there are likely to be only a couple of mountain lions. In big states with many such habitats, that still adds up: There are probably 5,000 mountain lions in California, for instance. And in places where game is protected, such as the Santa Catalina Mountains outside Tucson, Arizona, where desert bighorn sheep were reintroduced, there may be one or two more—and the earliest sheep that were brought into those mountains soon made meals for at least three lions. Big cats will sometimes descend from those mountains to drink from swimming pools and, in at least a couple of known cases, eat domestic dogs, but they are much more likely to keep to themselves.

When forced to do so, cats will sometimes travel a long way to find new territory. In 2011, one young cat that had been born in the Black Hills of South Dakota traveled 1,500 miles east only to be killed, in the end, by a car on a busy highway in Connecticut. That unlucky mountain lion wasn't alone: Biologists theorize that the ever-growing deer population in the eastern United States is a lure for predators of all kinds—a recipe for disaster if ever there was one and a good argument for encouraging deer hunting. It is because of that bounty of prey that mountain lions have been spotted just 50 miles from Washington, D.C., in the wealthy suburbs of Chicago and in the hilly woods west of Nashville—all places where they haven't been sighted since the late 19th century.

Dos And Don'ts

It turns out that when I skedaddled from the mountain lion, after losing sight of it, I was doing just the wrong thing. Cats stalk their prey, and then they chase it down. Even though mountain lions don't like to run after anything for long distances, they're still faster and more powerful than any human runner. As evidence, consider that woman who was killed biking near Seattle last year. When the lion ran onto her path, she turned in her tracks and tried to outrace it. Not even her fast bike could carry her away in time, and the mountain lion quickly overcame and killed her.

It should be noted, however, that the unfortunate woman was dealing with an unusual cat. The 3-year-old male was starving, well under its usual weight at less than 100 pounds. It should have been settled inside a territory to call its own by that time, but instead, it was on the move, probably driven out by a larger male cat. It did not stalk its victims, but instead faced them directly on a trail, putting itself in danger—almost certainly out of desperation. It paid for its act with its life, but unfortunately, so did the young woman.

So, what should you do in the unlikely event that a mountain lion crosses your path? There are a number of do's and don'ts, some preventive and some expedient. When in lion country, it's best to have at least a couple of adult companions

> **"Big cats such as mountain lions are what biologists call 'opportunistic hunters,' meaning that they'll take down whatever is easiest and readily available."**

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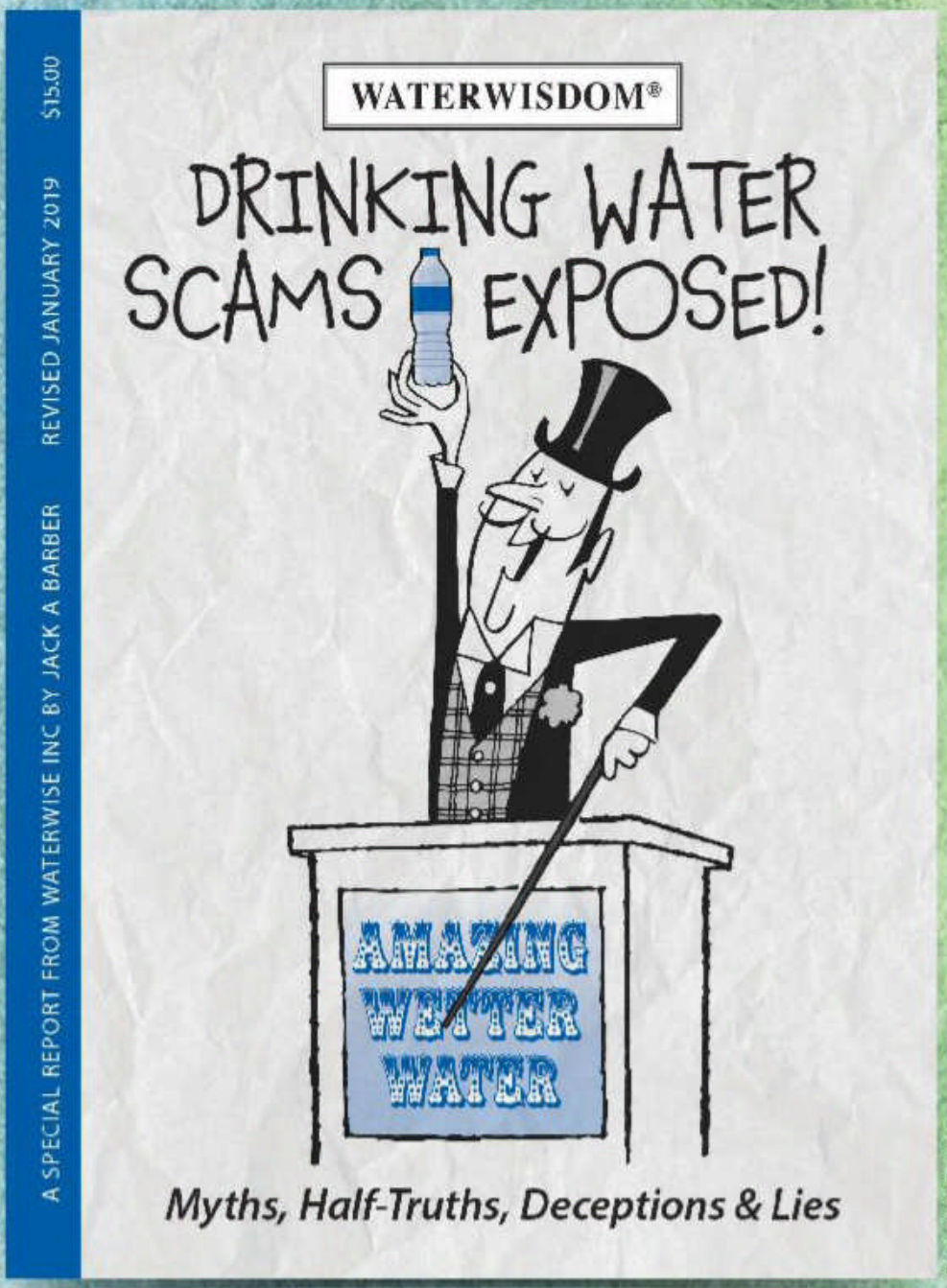
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Rivers with undergrowth are great places for lions. A warning sign (far left) in cougar country. A juvenile lion on the move (left).

along and to keep a lively conversation going as you move along, making enough noise to let cats—and dogs, bears and other critters—know that you're in the neighborhood. When camping, keep food securely stored away, and under all circumstances, move away quickly if you encounter a dead deer or other ungulate on the trail, since a cat or other predator might have taken it down and be nearby keeping an eye on its prey.

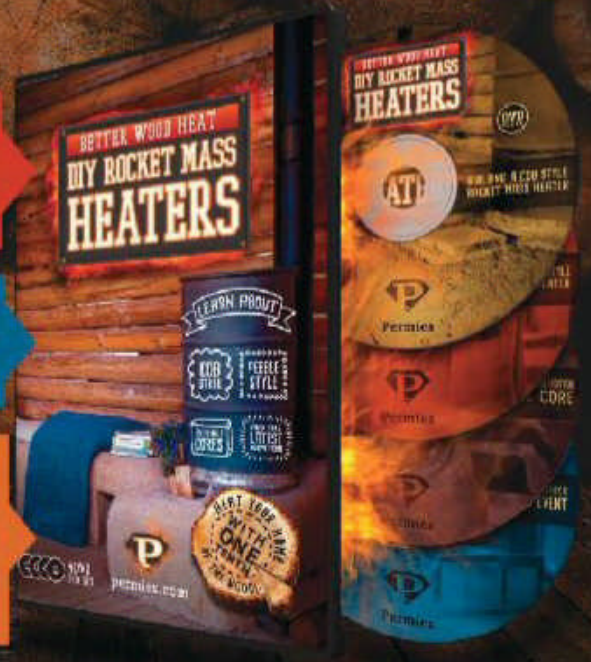
If you do come across a lion, then resist the urge to run, since running invites a cat to chase you down. Instead, as with bears, make yourself as big as you can: Puff up your chest, and spread your arms out wide. Make yourself noisy and fierce in appearance: Stomp your feet and yell. Make sure that you're facing the cat at all times, and if it moves as if to circle around you, move with it. In the unlikely event that the cat moves in to attack after all that, then, if you have a firearm, you now have every right to shoot. If you don't, then fight back however you can—for, as we've noted, mountain lions are opportunistic hunters, going after easy prey, and any prey that puts up resistance stands a better chance of survival.

Food For Thought

All that said, it's been estimated that a human is 300 times more likely to be killed by a domestic dog than by a mountain lion and 7,000 times more likely to die in a car crash—you're even much more likely to drown in your own bathtub or get hit by lightning out on the golf course. The fact of the matter is that countless more mountain lions die at the hands of humans and their machines than humans do at the claws of mountain lions. There's no reason, then, that mountain lions should keep a person out of the wild country. Still, as I say, when I go, I'm keeping my eyes open. ★

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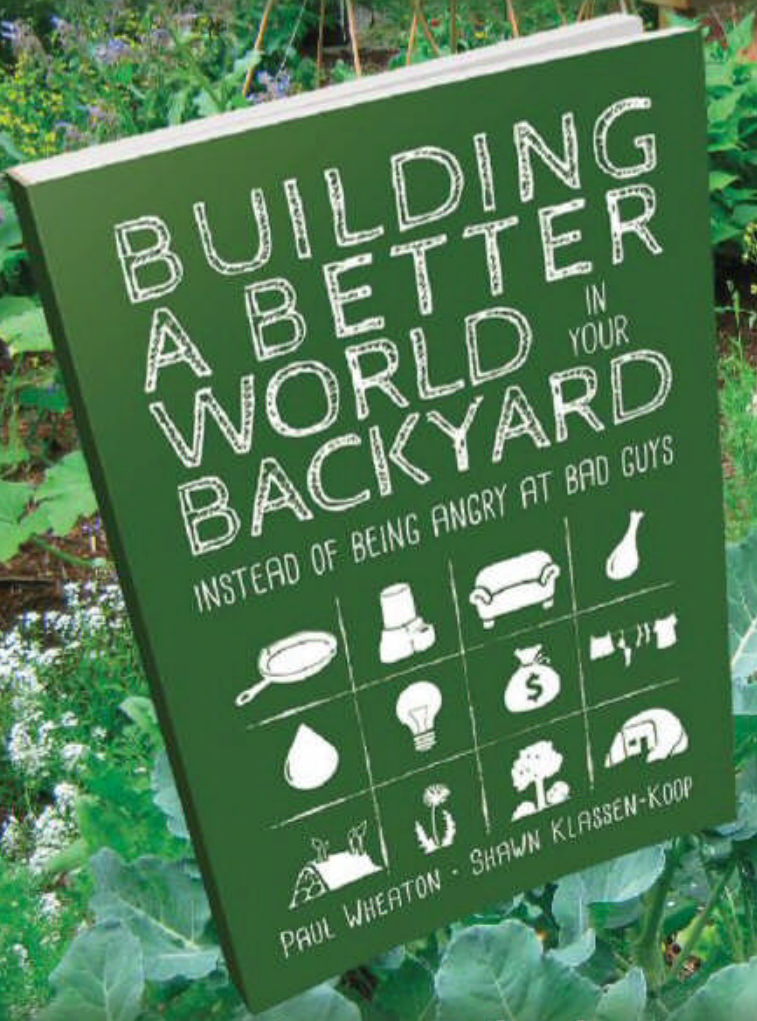
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